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PUBLIC HEARING

BEFORE THE UNITED STATES DEPARTMENT OF ENERGY

OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

ALTERNATIVE FUEL TRANSPORTATION PROGRAM

DOCKET NO. EE-RM-96-200

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Dallas, Texas 75207

Obelisk A Room

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P R O C E E D I N G S

MR. RODGERS: Good morning. I think we're going to get started here. I'd like to extend my personal welcome to you. Thank you for taking time out of your busy schedules to be here. My name is David Rogers. I'm energy policy team leader with the Office of Transportation Technologies at the Department of Energy. My colleague, Vivian Lewis, from the Office of General Counsel is here with me today. On behalf of the Department of Energy, I would like to thank you for taking the time to participate in this public hearing concerning the Department's Alternative Fuel Transportation Program.

The purpose of this hearing is to receive oral testimony from the public, from you, on the Department of Energy's advanced notice of proposed rulemaking. Your comments are not only appreciated, they are an essential part of this process as we move forward in implementing the Energy Policy Act.

The ANOPR, that's our acronym for this advanced notice, concerns alternative fuel vehicle acquisition requirements for private and local government fleets; and the ANOPR is required by the

Energy Policy Act of 1992. It begins a process to determine whether alternative fuel vehicles acquisition requirements for certain private and local government fleets should be promulgated.

This advanced notice also requests comments from the public on progress toward the goals set forth in Section 502(b)(2) of the Act identifying the problems with achieving the goals, assessing the adequacy and practicability of and considering all actions necessary to meet the goals. The ANOPR is intended to stimulate comments that will inform the Department's decisions concerning future rulemaking actions and nonregulatory initiatives to promote alternative fuels and alternative fuel vehicles. Can everybody hear me okay?

If you have not already read the Federal Register notice from August 7th of 1996, I urge you to do so. Copies are available at the back at the registration desk. And bear with me here as I read some of the required boilerplate for federal hearings of this type.

The comments received here today and those submitted during the written comment period will assist the Department in the rulemaking

process. The written comment period ends November 5th of this year. All written comments must be received by this date to ensure full consideration by the Department. The address for sending in comments is provided in the Federal Register notice.

As the presiding official for this hearing, I would like to set forth the guidelines for conduct of the hearing and provide other pertinent information. In approximately one week, a transcript of this hearing will be available for inspection and copying at the Department of Energy's Freedom of Information Reading Room. The address for that room is specified in the Federal Register notice. In addition, anyone wishing to purchase a copy of the transcript may make their own arrangements with the transcribing reporter.

This will not be an evidentiary or judicial type hearing. It will be conducted in accordance with Section 553 of the Administrative Procedures Act, 5 USC Section 553, and Section 501 of the DOE Organization Act, 42 USC Section 7191.

To provide the Department with as much pertinent information as possible and as many views as can reasonably be obtained and to enable

interested persons to express their views, the hearing will be conducted in accordance with the following procedures:

Speakers will be called to testify in the order indicated on the agenda. Speakers have been allotted 10 minutes for their oral statements. Anyone may make an unscheduled oral statement after all scheduled speakers have delivered their statements. Persons interested in making such an unscheduled statement should submit their names to the registration desk either now or before the conclusion of the last scheduled speaker.

And at the conclusion of all presentations, scheduled and unscheduled, speakers will be given the opportunity to make a rebuttal or clarifying statement, subject to time limitations, and will be called in the order in which the initial statements were made. Persons interested in making a statement should submit their name to the registration desk before the conclusion of the last speaker.

Questions will be asked only by the members of the panel here, myself and Vivian, conducting the hearing.

As mentioned earlier, the close of the

comment period is November 1996. All written comments received will be available for public inspection at the DOE Freedom of Information Reading Room in Washington, D.C. You can contact them at (202)586-6020. The address for submitting written comments is provided in the Federal Register notice. Eight copies of the comments are requested. If you have any questions concerning the submission of the written comments, please see Andi Kasarsky at the registration desk.

Any person submitting information which he or she believes to be confidential and exempt by law from public disclosure should submit to the address mentioned above one complete copy and three copies from which information claimed to be confidential has been deleted. In accordance with the procedures established at 10 CFR 1004.11, the Department of Energy shall make its own determination as to whether or not the information shall be exempt from public disclosure.

In keeping with regulations, there will be no smoking in this room.

We appreciate the time and effort that you've taken in preparing your statements and are pleased to receive your comment and opinions. This

introduction has been lengthy but we hope useful. And now it's time to move on to the important part, which is to hear your comments on the advanced notice.

I would like to call our first speaker on the agenda. For the record, I ask that each speaker please state your name and whom you represent before making your statement. Thank you very much. And at this time Mr. Kurt Dallinger, the Natural Fuels Corporation. And the podium is right over here to my left.

MS. McKENZIE: Obviously, my name is not Kurt. My name is Kim McKenzie. I'm marketing manager for Natural Fuels Corporation. The statement we submitted was written for Kurt, but I can speak in many ways for him, and, in fact, we are of an age and have a similar background, in terms of business.

My name is Kim McKenzie. I am marketing manager of Natural Fuels Corporation of Denver, Colorado. Natural Fuels was incorporated in March of 1990 as an unregulated subsidiary of Public Service Company of Colorado, the state's largest electric and gas distribution utility, and Colorado Interstate Gas Company, an interstate gas

transmission company and a subsidiary of the Coastal Corporation of Houston, Texas.

Natural Fuels was created to commercialize natural gas as a motor vehicle fuel in an unregulated free market environment. The primary goal was the function as a fuel retailer of natural gas, and in that regard we have come to operate more than 30 natural gas fueling stations against Colorado and into Wyoming. Many of these stations are jointly owned with gas utilities or petroleum retailers.

Because there were only promises of OEM vehicles in 1990, we also opened a state-of-the-art vehicle conversion and service facility to provide our customers with quality conversions to prime the market for OEMs. Since 1990 more than 2,000 vehicles, from forklifts to school buses, transit buses, pickups and minivans, have been converted to run on natural gas at our facility.

Finally, because we were maintaining fueling station equipment initially installed by our parent companies, we began to identify equipment modifications which could improve reliability and lower operating and maintenance costs; so we began retailing fueling station

equipment nationally and internationally.

Obviously, we have an interest in the successful commercialization of natural gas as a motor fuel. We started with that as our primary goal, and it remains a key emphasis for us; but we would assure you that the alternative fuels business had not been a cakewalk. If each of our employees and our parent companies did not firmly support the key benefits of what alternative fuels can bring to our communities, cleaner air, local jobs, economic growth and energy security, we could all surely find an easier way to make a living.

The advanced notice of proposed rulemaking was published for the purpose of evaluating progress toward the replacement goal stated, identifying problems with achieving the goals, assessing the adequacy and practicability of the goals and considering all the actions necessary to meet those goals.

I can't speak for other alternative fuels. Kurt has been in the natural gas business for more than 20 years, as have I. But I believe Energy Information Administration data as well as data from other respective sources will back me that the United States has economically

recoverable, proven reserves of natural gas that can supply our transportation energy requirements for decades; but our progress towards meeting the goals of replacing 10 percent of petroleum motor fuel consumption has been slow and halting and will be unattainable without a concerted national push to maintain the viability of the alternative fuels industry.

According to the American Automobile Manufacturers Association Facts and Figures '93, the United States consumes more than 130 billion gallons of fuel in passenger cars, motorcycles, buses and trucks. With the exception of motorcycles and passenger cars, each of those categories consumes an average of approximately 1,000 gallons of fuel per year.

To replace 10 percent of 130 billion gallons of fuel, 50,000 NGVs currently operating and perhaps 250,000 other alternative fuel vehicles would each have to consume more than 40,000 gallons of fuel each year. The other option would be to hope that voluntary and mandated compliance would convince vehicle buyers to purchase 13 million alternative fuel vehicles in the next three and a half years. Just as some background information,

my research shows that, in fact, the automobile manufacturers sell 13 million new vehicles each year in the United States, so I think we're looking at a pretty lofty goals here.

These numbers become laughable not because they are unachievable, but because no one really believes we as a society are serious about achieving them. Manufacturers do not build adequate supplies of vehicles because they say there are no buyers. Fleets will not push for vehicles because of perceived risks, both financial and operational, so they prefer to wait for the fleet police to come down the road and make them convert. Those who are building stations are no longer in a position to invest capital with no promise of potential earnings.

At the same time, I do need to say that Natural Fuels has many wonderful customers, public and private fleets both, using natural gas, fleets which took steps early on to meet mandates and regulatory requirements but who also believed that the switch to alternative fuels was the right thing to do for their community and their country.

With regard to the fourth purpose of the ANOPR, considering all actions necessary to meet

the fuel replacement goals, the Department requested comments on several general issues relating to achieving the replacement goals of the Energy Policy Act. Natural Fuels supports the inclusion of private and municipal fleets under the EPACT mandates, even though we would prefer that the economic benefits of alternative fuels be the focus of fleets' decisions. Without some substantial ensured market, however, we question whether vehicle manufacturers will provide the vehicles necessary for this market to survive.

Despite the proven ability of all three American automobile companies to produce clean, efficient, reliable natural gas vehicles, each has dropped in and out of production of AFVs. Until vehicles are available in sufficient quantities at minimal cost increments, we would especially support tax credits and other incentives to assist fleets in acquiring alternative fuel vehicles.

The types of vehicles which would make the biggest impact on fuel replacement goals would be buses, delivery vans and trucks of all types. Funding R&D into engines and storage cylinders, supporting ways to bring on-board diagnostic computer codes into the marketplace so aftermarket

conversions could be developed on a timely basis, until OEM vehicle production ramps up, and removing regulatory on other barriers from the alternative fuel marketplace, as well as providing incentives like faster depreciation of fleet AFVs, tax credits and so forth, would be most helpful in the near term.

Infrastructure development should not be an issue. I and my company can make a legitimate investment in alternative fuel stations, if I have a market. This is not a "build them and they will come" optimism. If I see a demand, I will meet it, and I will create jobs in the process.

I have been speaking as a business person. I am also a parent of -- I have three children, a 14-year-old and 10-year-old twins, and I have to tell you I am appalled as I watch what's going on in the Middle East right now, that we as a country would be willing to sacrifice our young people, our future generations and put them at risk in some Middle Eastern desert to ensure the flow of imported oil from around the world.

I think we have in our country alternative sources of energy, especially to replace motor fuels, right now that are already

available and usable; and I think we as a country need to focus on those and at least bring them into play so that we're no longer at risk from the people who apparently have very different goals and agendas perhaps than each of us does.

It is my sincere hope that we'll become serious about our search for replacement fuels and that we will be willing to invest in the fuels we have in our own back yard.

Thank you for the opportunity to speak today.

MR. RODGERS: Thank you, Kim. Vivian, do you have any questions you would like to address to the speaker?

MS. LEWIS: No.

MR. RODGERS: Okay. Our next scheduled speaker is Edward Zagorski.

MR. ZAGORSKI: Thank you. My name is Ed Zagorski, and I am senior vice president of operations for Associates Leasing. I'm also representing the American Automotive Leasing Association this morning. And I want to thank you, Mr. Rogers and Ms. Lewis, for giving me the opportunity to speak this morning. Thank you very much.

I am Ed Zagorski, senior vice president of operations for Associates Leasing in Carrollton, Texas and that is a suburb of Dallas. Associates is one of many corporations in the United States that provide vehicle acquisition, ownership, maintenance, operation and resale services to private commercial fleets as well as to government fleets. We as well as our counterparts in the American Automotive Leasing Association throughout the country specialize in increasing the reliability, the effectiveness and cost efficiency of motor vehicle fleets and act as partners with fleet operators in meeting those needs.

While the largest number of vehicles in use are sales and service vehicles, other applications we have, for instance, include medium-duty trucks used in hauling cable and heavy equipment, box vans used to carry restaurant equipment such as ovens, local and long distance goods moving equipment and chassis cabs with boxes in the back that are used by caterers. Many of our vehicles are housed within but are operated outside metropolitan areas.

Associates provides leasing, financing and management services for over 200,000 vehicles.

Our industry has about three and a half million vehicles in operation by our lessees. Our role places us, we believe, in a very unique position. We're heavily involved and concerned about the introduction of alternative fuels into fleets. At the same time, we're really economically disinterested. We don't have anything to lose by a shift from one fuel to another, and we're not vested in any particular fuel or technology. In fact, new products and market changes increase our value to customers as advisors, so it's conceivable that alternative fuels could present financial opportunity to Associates and other vehicle lessors.

Having said this, I must tell you that we believe it would be a mistake to issue a private fleet mandate through this rulemaking proceeding. The general approach, we believe, is flawed; and even if it were not, there are inherent and circumstantial problems with going forward with such an effort that it makes it ill-advised at this time.

Let me take a moment to explain. Several aspects of the private fleet market combine to work as a barrier to the success of the fleet

acquisition mandate. First, the displacement of gasoline and diesel fuel would not occur to any significant extent because the fleet vehicle population size is small compared to the total number of vehicles on the road. Total fleets constitute between three and five percent of all motor vehicles, while the scaled back number covered by the proposed rule would be a fraction of that because of weight limit, central fueling criteria and other vehicle exclusions and exemptions.

Secondly, because of the reasonably small proposition of vehicles covered, energy security interests are advanced only if the program generates a positive value as a demonstration to the broad vehicle mark at large. The attitude and opinion, as well as dollars and cents, affect the vehicle market as extensively and just as certainly as it drives the stock market.

In this case forced acquisitions, operational dislocations, required paperwork, risk of government inspectors, noncompetitive pricing and service and mandated deadlines all unconsciously work to create a negative attitude to a fleet operator that ensures that the chance that

alternative fuels would get a fair shake by fleets would be slim to none. Even if the economics makes sense, the presence of a government purchasing agent as a partner in making vehicle selections would negatively affect the attitude and opinion for all the reasons I just mentioned.

Because the vehicles are usually used on routes covering substantial distances and numerous stops or calls on businesses and households, a real world possibility exists that negative, adverse word of mouth publicly about alternative fuels could do unnecessary harm instead of promote the development of a sustainable market. Even the possibility of a future mandate for fleet acquisitions constitutes a dark cloud over the current market.

Thirdly, because the mandate acts as a disincentive, it works at cross purposes the incentives that have been enacted or are under consideration to encourage voluntary use of alternative fuel vehicles. It also puts the fleet industry, which should be aligned with the advocates of incentives, devoting their efforts instead to opposing mandates.

And, finally, the very nature of the

fleet industry makes the prospect of successful mandates remote. If a fleet operator cannot economically shift to alternative fuel use, that operator will be forced to disband its fleet and reimburse its drivers for using its own vehicles. It's not a rare occurrence. Market forces today often result in shifts back and forth from reimbursement to managed central fleets, absent any intervening government requirements. Mandates create artificial pressure to eliminate organized fleets, which, in turn, exacerbates the situation.

Now, in specific response to the questions asked by you, the Department of Energy, in this rulemaking notice, I'll offer the following comments:

As to vehicle availability, we urge the Department of Energy when making any assessments about vehicle availability to take into account the variety of cars and trucks necessary to meet the diverse needs of fleets that would be required to purchase alternative fuel vehicles. If the variations of configuration needed by fleet operators aren't available, it will not only burden the fleet; it will also jeopardize the outcome of the program.

A Taurus, for example, is a fine vehicle, but if that were the only model available under alternative fuels, customers' needs could not be met; and the previous examples I've cited are examples of where the Taurus does not meet those customers' needs.

To illustrate in another way, this is our fleet selector guide for 1997. This lists in over 130 pages all the various makes and models produced by U.S. manufacturers and, in fact, foreign manufacturers, identifying the various types, models and specifications that we determine are appropriate for fleet consideration. In fact, there's even other vehicles that aren't included in here that might not be appropriate for fleet consideration.

It's not uncommon that our customers -- not only our customers at Associates, but those of the leasing association may order 10 or more different models in any one year, body styles, different chassis. This is a selector for one of our customers. I won't mention the name. But there's 22 different models in this selector ranging from pickups, F350s, all the way down to Contours. As of today, manufacturers have not even

come close to offering anywhere near the same variety and volume of vehicles that use alternative fuel, nor do we feel they will do so in the foreseeable future.

As to fuel and needed infrastructure, it's important to note that operational reliability hinges on two things, vehicles that are certain to not break down and adequate refueling at locations and times that fit the business plans of companies, considering extended range as well as central fueling. This isn't a matter of convenience, as it may be at times for personal vehicle usage. It's the productivity of the person using the vehicle that matters the most. For example, the fully attributable cost of a salesperson or service technician on the road can easily be upwards of $150 to $200 an hour, so the impact of traveling to out-of-the-way refueling locations, running out of fuel or being disabled due to the mechanical failure of a new technology can add up to significant operating costs subject and apart from the actual fuel and vehicle cost differential. Those costs can also create competitive disadvantages for covered fleets in comparison to fleets that are exempt.

As to industry impact, to understand the competitive effects, it's important to understand the lack of barriers to disbanding a fleet that a driver reimbursement program -- that would place the drivers outside the program would involve. An organized fleet normally exists only because of the cost of advantages, in some cases only slight cost advantages, over companies that merely reimburse their employees for using their own vehicles. And the typical fleet could only sustain a limited additional cost or competitive disadvantage before it would be forced by market conditions to shift over to driver reimbursement.

It's not difficult for a business to make such a shift. It happens in both directions fairly frequently. It's only a matter of a company deciding to dispose of its vehicles and notifying us or purchasing vehicles and notifying us. In the face of costlier or unmanageable mandates, it would happen to such an extent that it would be a disaster to fleet leasing and management companies. Also because of the loss of a significant potential market, it would set back the development of alternative fuel vehicle use generally.

Even though the broad-based mandates do not make sense across the board, many specific fleets are excellent prospects for voluntary use for the locations and uses where it would make sense. That's far less likely in the case of individual one-on-one purchasers.

I urge the Department to use the opportunity presented in this rulemaking to take three steps that could work for developing alternative fuel use:

First, we recommend the Department should not only announce it will not issue early rulemaking, but also take the more decisive step of making a policy statement against further mandates under the Energy Policy Act. And as I talked about at the start, the biggest barriers to alternative fuel use are mandates. They harm the market, not help it.

Second, we recommend that we work to create incentives that eliminate the entry level problem for those fleets interested in pioneering the use of alternative fuels, and these can be financial incentives to recoup fuel, infrastructure and operational costs. It can also be operational incentives that reward alternative fuel use by

fleets. Good examples would be HOV lane rights, preferred parking, loading and similar preferences.

Third, the Department of Energy should continue to work with the administration to increase the number of models of alternative fuel vehicles that the federal government purchases. A policy of leading by example, not by mandate, should be pursued.

I appreciate the opportunity to testify today. Just as a side comment, if the mandate were to go into effect -- for instance, my wife is a salesperson. She covers about a 500-square-mile territory that includes places like Wichita Falls and Abilene, Waco and East Texas. And the availability of alternative fuels for her vehicle plus the very limited range that exists today in manufactured vehicles would be a real concern for her and for her fleet.

If there's any questions, I'd be happy to take them, and, again, thank you very much.

MR. RODGERS: Thank you very much. I did have one question and one request. First, is it possible for us to get a copy of your fleet preview?

MR. ZAGORSKI: Of this? I'd be

happy to send that along.

MR. RODGERS: Thank you. I think that would be very helpful to us.

The second is you listed a lot of characteristics of fleets being something that the public can see vehicles in operation and it could be a negative impact, and, I guess, if -- I would just like to ask if there were a combination of vehicles and fuels, alternative fuels, that was cost beneficial for a fleet, that the drivers liked, that had excellent performance, low maintenance, if, in fact, that very public image that your fleet has might be a positive benefit for the use of alternative fuels.

MR. ZAGORSKI: Well, I think, as I said, the mandates are the issue with us. Really, when you come right down to it -- we talked about three and a half million vehicles in use by fleets, and I talked about one customer that runs 22 different types of models. Now, that customer only has about 500 vehicles on lease with us. But what you're talking about is, you know, as I say, you've got -- gosh, I want to say over a thousand various types and models.

Now, our issue would be the availability

of the vehicles to run in a range and in areas where they may not be easily refueled, and, you know, the equipment on the market today and knowing what is available doesn't allow for that easy refueling because the range is just not there and because the variety of vehicles, quite frankly, is not there.

I'm not a manufacturer, so I can't speak to availability. I'm not a person that runs a box van, so I don't know, for instance, how many miles he can squeeze out of it. But I do think there's a lot of opportunity here in metropolitan areas.

This morning, driving down here to the conference, I was on Interstate 35, Stemmons Freeway. It took me roughly 30 minutes from Carrollton to get here, and that with no traffic would be about a 20-minute ride. They opened an HOV lane on I-35 last week -- or actually on Monday here, and there was nobody in that lane, and, you know, if you could provide fleet vehicles with a sticker that would allow it to use the HOV lane, I think that would be a tremendous productivity tool and would go away from the mandate.

I think mandates are just going to be something that will be very difficult for our users

to swallow, and the thing I -- the two things I fear, number one, if you have a mandate and if 50 vehicles is the threshold, you'll see fleets go up to 49, and then at that point they'll disband. So what have you done? You've seen people go away from what the policies intended to enact. And, number two, I think you'll go, as I say, to driver reimbursement. We have that all the time today. It's really got to be cost justified, and it's got to be fully available before, I think, our lessees, our customers, before the association would feel comfortable, in answer to your question, in supporting the mandates.

MR. RODGERS: Vivian?

MS. LEWIS: Yes, I have one or two questions.

MR. ZAGORSKI: Sure.

MS. LEWIS: The customer you mentioned that's typical, that's not the typical customer under your program, is it, 20 different types of vehicles?

MR. ZAGORSKI: I didn't bring out the other -- some other examples. I have --

MS. LEWIS: That must be a very large one.

MR. ZAGORSKI: Actually, they only have about 500 vehicle on lease with us. Our largest customer has over 4,000 vehicles on lease with us and doesn't have near that many different models. It really depends upon the type of use.

Now, for instance, somebody is using various gradations of cars to handle samples. For instance, let's say you're a drug company and you have a salesperson hauling samples and another person hauling machinery, et cetera. It really depends upon the type of company that you're dealing with and how many product lines they're in.

MS. LEWIS: I appreciate, you know, the positives and the negatives that you gave us, but I'm more interested in the negatives. Because when we put a rule, which we may or may not do here, we like to know what impacts our regulations are going to have on what we're dealing with. So you mentioned something about -- and I'm going to say, as an attorney, I don't really deal with the technical aspects of vehicles per se. I hear Roger and the other technical people talking about them, but I have to accept what they say and what I read. But I remember reading a report dealing with

our Federal Fleets Program, and I don't recall -- David, you can back me up or tell me I'm wrong here. I don't recall seeing a lot of problems in those vehicle which are out in our fleets right now; but from what you said a few minutes ago, you must have some information that there must be problems with some of these vehicles whether it's natural gas, propane or what have you, that may be experiencing a lot of mechanical problems.

In particular you mentioned something about the mechanic. You may have to pay 150, $200 an hour in case the vehicle breaks down. I assume we have the same typical problem with any conventional type vehicle, I would assume.

MR. ZAGORSKI: Well, --

MS. LEWIS: But with these vehicles, surely, they're relatively new on the market, so you expect certain types of problems. But could you speak to the potential problems?

MR. ZAGORSKI: Sure. And I think you hit on that in the last phrase that you used, and that is the relatively untested technology. You've got a combination of things happening, and I appreciate your question.

Number one, you have vehicles that we're

going to be asking to be used outside of major metropolitan areas. What that means is that you have to find people that can fix those vehicles when they break down.

Secondly, you've got the untested technology, and certainly I think one of the issues we have right now is range of those vehicles. They do only run 80 to 150, 250 miles, even in the case of flexible fuel vehicles, which what you have are vehicles that have to carry two fuel tanks, which cuts down on mileage and the like. So you've got some -- you've got some issues with that.

And, again, you know, that's not to say that we're opposed to incentives for vehicles and the like, but we're just saying we need technology that's readily available, that's certain. And we understand it took a hundred years to develop the internal combustion engine to the place it is today, and to tell three and a half million drivers that suddenly within the next two to three years you're going to have to begin converting to a technology that's only really come even to the point where it is today over the last 10 years or so, is making a pretty substantial leap of faith in our estimation. Does that address your --

MS. LEWIS: But you don't have any direct information about maintenance problems, real serious maintenance problems, of these alternative fuel vehicles? I understand that infrastructure is a problem in some places, but I'm more interested in the maintenance of these vehicles.

MR. ZAGORSKI: What I will do is I will go back to our maintenance people, and we will get you an answer on that.

MS. LEWIS: Thank you.

MR. ZAGORSKI: There is some data that we have. And we do have some alternatively fueled vehicles under lease today, so it's not a problem that's foreign to us. And when I made that statement, yes, we have seen some additional maintenance --

MS. LEWIS: What type of vehicles do you have?

MR. ZAGORSKI: We have Tauruses.

MS. LEWIS: I mean, the alternative fuel vehicles.

MR. ZAGORSKI: Yes, some Tauruses and some pickup trucks and the like.

MS. LEWIS: And they're running on what type of fuel?

MR. ZAGORSKI: They run on natural gas and ethanol.

MR. RODGERS: Thank you very much, Ed.

MR. ZAGORSKI: Thank you.

MR. RODGERS: Our next speaker is Christopher Amos. Christopher wins the award for the most novel tie of the day.

MR. AMOS: I actually am a fleet administrator. You have to wear a tie to make a statement, right? Most of the time I get away without having to wear one.

I'm Chris Amos and I'm representing the National Association of Fleet Administrators today. I thank you for the opportunity to participate in this hearing. I'm Chris Amos, commissioner of equipment services for the City of St. Louis. I'm here today to share with you the views of the members of that National Association of Fleet Administrators, NAFA.

NAFA is an association of professional fleet managers. Our 2,000 members manage more than 2.7 million cars, vans, medium/light-duty vehicles for corporations, utilities and government agencies. I manage the largest public fleet in the

St. Louis region with 2800 vehicles. The mandates in the Energy Policy Act affect St. Louis. St. Louis is also a modern nonattainment area which will likely be reclassified as a serious area later this year and be subject to the fleet mandates of the Clean Air Act. St. Louis has tested light-duty vehicles running on propane, compressed natural gas, ethanol and biodiesel. We are in the process of procuring our first heavy-duty CNG vehicle.

While all of the fuels have proven viable for some portion of our locally operated fleet, none currently offer the needed combination of functionality in terms of payload and range EPA certification as a low-emission vehicle and life cycle cost parity with conventional vehicles. So far I have delayed any large scale implementation of alternative fuel vehicles hoping for improvements in technology and improved life cycle cost.

As a founder and public chair of the St. Louis Regional Clean Cities Program, I have voluntarily worked to help both local fleets and fleets across the country to make informed decisions about using alternative fuels. St. Louis hosted the first natural Clean Cities conference,

where I represented the fleet perspective in the ultimate Clean Cities session and moderated the fleet managers workshop. DOE again invited me to instruct the fleet managers workshop at this year's conference in Atlanta.

I will step ahead and talk about barriers. Businesses and local governments are very cautious about making substantial investments in AFVs until the technology is further developed and practical concerns with the cost, infrastructure and operational considerations are resolved.

Despite support for alternative fuels, business decisions have to be made. In practical terms a fleet owner must decide to acquire alternative fuel vehicles by answering two questions: First, can I obtain an alternative fuel vehicle which will meet my needs? Second, can I obtain the fuel on which the vehicle will operate? Unless the answer to both questions is yes, a fleet owner cannot be expected to purchase AFVs. The answer is no for most fleets because we have not overcome substantial barriers. Today I would like to address three of these barriers: vehicle cost, infrastructure and driving range.

On the first one, vehicle cost, the economics of AFVs is not favorable. We welcome the recent announcement by Ford Motor Company that it will reduce the cost of many of its alternative fuel vehicles for the 1997 model year. This will spur sales in the near term. In fact, I just placed an order for a new pickup truck for myself with that incentive. However, it is not a measure of what these vehicles will cost next year, and I think DOE will agree that eventually Ford will have to price these AFVs at their true cost.

There are three major factors when considering life cycle cost of a vehicle: acquisition cost, operating expense and resale.

Acquisition cost. For fleets today, initial cost is the number one criteria in vehicle selection, and that is particularly true, I might add, in the public sector, where the low bid is almost always the overriding concern on what it is we buy. The increased cost of AFVs is one key reason that the federal government has failed to comply with mandates to acquire alternative fuel vehicles. The incremental cost of a CNG light-duty vehicle can range from 2,000 to 5,000.

Please consider the following:

The presidential advisory committee in Car Talk reported that the current NGV incremental cost is roughly $3500.

Metro Dade County in Florida reported the average cost for CNG new or conversion is approximately $5100.

In comments to DOE, the State of Washington Department of General Administration reported the cost of OEM alternative fuel vehicles is also a major deterrent to fleet purchase. The Price premium for a three-quarter ton regular cab pickup was $6,669 or more than 50 percent over the vehicle's base price.

The other bifueled vehicles in the state contract carried similarly large price premiums ranging from 36 to 44 percent of the base vehicle price.

Operating expenses. For many fleets even when the alternative fuel itself is more economical, which is true in the case of propane and natural gas and not in the others, recovering the equipment investment over the life of the vehicle is not possible. One of the nation's largest municipal fleets reports that with the large capital investment required, there will be no

payback within the life cycle of CNG vehicles.

Please consider these important points: The average light-duty vehicle uses 850 gallons of fuel per year. In the case of a local government, the cost of CNG is 30 to 35 cents under the retail price for gasoline. Based on a yearly usage of 850 gallons, the savings would be $225 per vehicle per year. In this situation it would take 15 years to recover the added cost of $3,500 per vehicle. And I don't know about you, but I haven't seen a light-duty vehicle on the road yet that will last them 15 years. They rust in two before that happens.

The State of Washington commented to DOE even at a fuel-cost saving at 50 cents per gallon the initial vehicle investment would not be covered over the five-to-seven-year operating life of a typical state vehicle.

Other fuel-related costs can offset any benefit of the lower price at the pump. In the DOE analysis provided to Car Talk, the cost of CNG for a dedicated vehicle was $1.11 per gallon equivalent versus $1.02 for gasoline when costs for increased fueling and search time are included.

The use of CNG, a lighter-than-air fuel,

requires major renovations to older maintenance facilities to eliminate open flame heaters, update lighting systems and improve ventilation. These changes have cost some fleets over a million dollars in capital investment.

I have eight garages myself in the city of St. Louis, and not one of them is capable of meeting the fire codes for working on alternative fuels, for working on compressed natural gas; and to date, the OEM manufacturers are only producing compassed natural gas vehicles that meet both Clean Air Act and Energy Policy Act mandates, if they were to be in place. So that puts me in a position where either I've got 97 mechanics working for me that can't work on them in our facilities, or I have to spend 600,000 to a million dollars per each of my eight facilities to upgrade them to work on these vehicles.

And that problem being lighter than air is a significant issue with compressed natural gas. It's a great fuel, it's a good price, but it's one of those hidden costs that a lot of fleets are not aware of. And when you're dealing with propane and ethanol and methanol, biodiesel, you don't have that lighter-than-air problem, so you

don't have the facilities; but then you don't get the benefits that a compressed natural gas engine will offer, and you also have a problem with the nonavailability from the OEMs. So at this point, you've only got one choice, CNG, and that one choice is going to cost me a bundle.

Resale value. There's no objective data available on what the resale value might be for AFVs. Most data is speculative at best. I might add to that statement that in the case of a municipal fleet, most of us drive our vehicles until they drop; so the value of the vehicle at the end of the driving period is minimal at best. I mean, a pickup truck that cost $15,000 initial purchase price, we'll be lucky if we get $400 for it by the time we're done using it. But that's not typical for most commercial fleets.

Most fleets operate their vehicles 60,000, 80,000 miles, maybe, and then they're ready to trade them in. You just heard from the gentleman about leasing. Of course, a typical lease is around that period too, around 60,000 miles. So whereas when you get a fleet like mine, a public fleet that operates right in one area, if we can't make it work economically, then those

commercial fleets that are out there operating under different circumstances don't have a prayer of operating economically.

Barrier two, refueling infrastructure. The number one barrier in the use of alternative fuels is the refueling infrastructure. In a survey that NAFA conducted in California, when we asked the drivers to compare the operation of their FFV, flexible fuel vehicle, with their previous gasoline vehicle, most found the FFV to be as good or better. However, when asked will you purchase an alternative fuel vehicle for personal use, the overwhelming majority said no because of the lack of convenient fueling facilities. Of fleet managers surveyed, 61 percent of those offering comments cited inadequate number and location of methanol fueling facilities as a discouraging factor.

For CNG, the inadequacy of CNG refueling infrastructure is a major barrier to widespread fleet use of this fuel. Of the CNG stations in operation today, the majority are not available for convenient retail use. Fleets are encouraged that many more stations are being planned. However, the large investment required to put in a CNG refueling

facility estimated at between 250 and $500,000 causes many fleets to question whether an adequate number of stations will be in place within the foreseeable future.

Some fleets have negotiated with utilities to install CNG stations. The experiences run from excellent to poor. A large government fleet in New York reports that discussions with large gas utilities has been frustrating in the area, to say the least.

I'd say that on a case-by-case basis, in my fleet's case and with many of the others that I've talked to, we can normally -- if you operate a vehicle fleet within a confined area, we can get good cooperation from the fuel suppliers and from the infrastructure folks to put stations in where we need them. The problem is that you have to have so many at once to make it economically viable for them. You can't expect them to spend three to $400,000 putting in a station for 10 vehicles. It's just not reasonable to expect that.

And in the same term, whereas I may spend $3 million buying vehicles this year, of those that I might spend that would run on any one given fuel, I'd be lucky if 10 or 15 of them will be a certain

alternative fuel. So even if we build coalitions like we do in the Clean Cities program, it's difficult to get those stations open just because of the sheer numbers it takes to make it viable.

You know, you talk about putting in a gasoline site, you're talking about 60 to $65,000 to do that. If you're talking about putting in a compressed natural gas site, that 300 to 500,000 is a whole different ballgame as far as economics are concerned.

Okay. Driving range. The infrastructure needs are magnified because of the reduced operating range of alternative fuels requiring more refueling events and lost productivity as drivers seek out stations. There has been some improvement in operating range issues, and I think the manufacturers are trying to address that; but it still is a major problem.

According to data provided by the California Energy Commission, the driving range for a gasoline vehicle is 364 miles per tank as compared with the range of CNG of 150 miles per tank, and for methanol of 217 miles per tank.

The U.S. General Services Administration reports that the driving range for CNG vehicles has

been much less than predicted. That's pretty much consistent with what you see on the data sheets from the manufacturers. Everybody who's driven them will tell you, you know, plan on about 80 percent of that as a real operating range.

The utility fleet in New Jersey reports a loss of 20 percent of fuel economy for CNG van conversions. In California fleets and drivers of methanol FFVs report that the limited range plus more frequent refueling needs were significant disincentives. Many law enforcement fleets reported poor operating range as a significant problem for CNG vehicles. In Oklahoma a municipal police department is struggling to operate CNG in a metropolitan area.

I might add at that point that the current structure of the mandates which limits itself and the size of the vehicles to only the light-duty vehicles to only light-duty vehicles and exempts law enforcement fleets is -- I don't think -- it's not well-founded. If there's any vehicle that can break even on an alternative fuel, it's got to be a police vehicle. These are big gas hogs driving full-sized vehicles. They're lucky if they get 10 miles to the gallon on conventional

fuel. They stay largely in a confined area. We've had good luck running police vehicles on both natural gas and on propane, but with the natural gas issue, the range is a major consideration. You're talking about vehicles that are running 45,000 miles a year three shifts a day on CNG. The experience has been they're having to fuel up about every shift instead of once a day for the three shifts, and that's a significant time factor. That means that they're sitting at the gas station for 10 or 15 minutes instead of out on the road doing their job. So there's a -- you know, range is a consideration, but law enforcement vehicles are definitely a viable alternative for this process. And those -- and if you look at the voluntary compliance around the country, you'll find that a lot of municipal police units have tried this fuel and have been successful with it.

In conclusion, to date the federal government has failed to define and follow a sound coordinated alternative fuels policy. A policy that has fleet mandates as their focal point is about as effective as putting a Band-Aid on an amputated limb to stop the bleeding.

Fleets represent less than five percent

of all light-duty vehicles on the road. In light of uncertain federal policies along with higher vehicle costs, sporadic manufacturer commitment and the lack of a refueling infrastructure, the prospects of a major transition to AFVs is very risky for those of us responsible for critical corporate and government fleet assets.

No one is more committed to making alternative fuels work than I am; however, I have no intention of committing professional suicide by spending more tax dollars than I must to provide quality fleet services. Fleets can help be a valuable springboard for expansion of AFV technology to the general public, but mandates are not the answer. Mandates have not eliminated the barriers that exist to widespread use of AFVs. Mandates have not reduced the cost of vehicles, built any more fueling stations or increased the range of vehicles.

We urge the Department of Energy not to impose mandates but to foster voluntary partnership that builds on the successes of DOE's Clean Cities Program, a partnership that focuses on overcoming barriers developing technologies and putting AFVs on the road.

That's the conclusion of my prepared remarks. I do have a couple of points I'd like to make that haven't necessarily been sanctioned by NAFA, so take this from Chris Amos alone, okay?

In the ANOPR there's a reference on page 41035. I guess it's right before Roman numeral II. It says, "If DOE were eventually to determine that the conditions for the late mandate under Sections 507(e) and (g) were not met, DOE would be required by Section 509 of the Act to submit to Congress recommendations for possible requirements or incentives applying to the fuel suppliers, vehicles suppliers and motorists that would achieve the goals."

I would say from my perspective in this in trying to make this work and talking to everybody I can find who was also doing the same thing, that you ought to skip straight to that step. We ought to be doing that now. Let's forget about the mandates, particularly with fleets, because you're talking about dropping the bucket overall trying to meet the 10 percent and 30 percent reduction.

There are certainly some things that can be done, and I offer a few suggestions for you I

think you ought to be considering now. Just skip discussion about mandates and stop saying we might do this later, because all that does is it keeps fleets on the edge the whole time. We're saying, well, maybe we should be planning on doing this, and then we turn and find out, well, we're not going to have a rulemaking; and then, you know, we'll be going through this in a few year. We'll be saying, well, maybe we're going to do this again; and then, you know, it either comes through or it doesn't.

But if we stop discussing a strategy that does not seem like it's going to be productive and start dealing with the real issues at hand, which we've discussed here today -- I think the previous two speakers have addressed them well also -- then we can move on with a coordinated policy with the EPA and the Clean Air Act, DOE and the Energy Policy Act, the Traffic Safety Administration to get the tax laws straight, and deal with it as an entire package and move towards it.

I personally acknowledge the fact that our energy deficit, what we're importing in oil, is one of the major concerns of this country, and the problem is that people don't know about it. People

don't acknowledge the fact that we have this economic crisis looming over the horizon, and those who have been doing the research on it have been living it, knowing that that's a problem. But our actions are at the federal level, and the problem is the will of the people is inconsistent with what we're saying we want to accomplish.

If what we want to accomplish is to reduce the amount of imported oil, then everything we do national policywise is contradictory to that. Number one, in the '70s we had our first oil crisis. It hit everybody. Everybody was talking about it. We went to smaller cars. We cut down the speed limit. We started looking into voluntary means of conservation.

Well, some of the things -- you know, some of the answers that Congress came up with have had some effect, but, you know, where are we now? Prices have been stabilized. What did we have to do to stabilize them? The last presidential election year we ended up fighting a war to protect our oil reserves. You know, we fight a war to protect our oil reserves. So what message does that send? It sends that we want -- we're addicted to cheap oil. That's what it says. We're willing

to do whatever it takes to keep our oil cheap.

So here we are next election year, and what happens this year? We have a spike in oil prices in the spring, and everybody starts crying, oh, it's a conspiracy. So the reaction is we dump out of the national strategic reserves and we repeal a tax on fuel to lower the price of oil.

The only way that alternative fuel is going to become a viable alternative for us is to widen the gap between conventional fuels and alternative fuels; and if that's not -- if that's allowed to happen naturally through the market process, then this will eventually all take care of itself, because as the shortage of oil occurs, then we will start turning to these internal reserves.

The only reason oil became so prevalent in the transportation market today is because it was the cheapest alternative--ethanol's been around forever; biodiesel type products have been around forever; natural gas has been around forever--so that's the only thing we needed to worry about.

Okay. I'm out of time, so I'll conclude.

MR. RODGERS: Chris, thank you very much for your comments. One quick question. Because the EPACT mandates focus on centrally

refueled fleets, are you convinced that the infrastructure is going to be a serious issue for fleets that don't have to refuel out in the rural areas but only have to refuel once a day at their central location?

MR. AMOS: Well, central refueling is almost a misnomer. I mean, the city of St. Louis is not that large. I mean, you can drive -- you know, it's 20 miles end to end, just where my fleet operates, my 2800 vehicles are in there. But for conventional fuels, for diesel and gasoline, we've got 10 fuel sites, because they're located where the people work, because those vehicles don't travel clear across town. Currently, we only have one single natural gas site in the city limits. Our gas company, our local utility and Shell Oil Company have gotten together and are putting one in for us this year, and that's going to allow us to move to CNG for the first time.

But, you know, how many vehicles is it going to take economically for them to do that? You're talking about police vehicles and utility vehicles and dump trucks and everything else. You know, we're going to try trash trucks working on

natural gas. The issue becomes how far are you willing to go and how much time are you willing to waste trying to get to it.

So even in a case where you've got a small geographic area, relatively speaking, and my vehicles hardly ever go out, you know, of town, still, how many sites do I have to have to work? For conventional fuel we've invested for 10. Now, to build 10 compressed natural gas sites or propane sites, you're talking about a major capital investment; and it's taking, you know, the efforts of some great men and lot of dollars and lots of screaming at high levels to get one put in.

So it can be overcome. It can be overcome. The problem is there really is no incentive to overcome it at this point. As soon as we guarantee them, we will use them. I'm sure that the infrastructure will get built.

MS. LEWIS: I appreciate your comments. Are you going to submit written comments for the record other than what we have here?

MR. AMOS: I had planned on submitting some personally, yes.

MS. LEWIS: Because I would like to know exactly some of the -- if you would embellish

on the problems that you might have with your infrastructure, coming out of your perspective, just for us to get a better feel for what problems we will have to deal with as well as what you're dealing with, if we go to a rulemaking.

And speaking of the rulemaking, I think you mentioned something about law enforcement vehicles. The Act does allow the Secretary to include law enforcement vehicles if we go to what we call a later rulemaking under Subsection (g). Also we can include urban buses under this particular rulemaking, if we do so by determining whether we would want to do that.

MR. AMOS: Well, our police department is voluntarily using -- actually, they're in the process of procuring natural gas vehicles for the first time, and our bus company, Bi-State Development Agency, has voluntarily moved towards using CNG buses. They've used two of them for the last four years now, and their plan is to have 200 of them in place by the year 2000. So there are definitely applications for this, and there are definitely success stories to be shared.

And I guess I've got one parting comment. I can say that I think the Clean Cities

Program is probably the best thing that's come out of Washington in years. Take that from a cynic. You spend very little money and get a lot of good out of it in terms of valuable framework for those of us who are interested in solving this problem to work together, and it keeps us in a position where we can share information amongst each other through an organized network, and it allows us any time somebody else shows some interest to be able to share that information with them. So the work DOE is doing in that regard is very much appreciated from my perspective.

Since Clean Cities Program was established, it's been a whole lot easier for me to communicate and get information than it was previous to that. The two years I spent before the Clean Cities Program was just like -- it was mind-numbing trying to find information on the topic, so thank you for your efforts in that regard.

MR. RODGERS: Thank you very much, Chris. Thank you for those kind words. Our next speaker is Mr. Jim Moore. And I just would advise folks that you have no obligation to stick around after you've given your testimony. You're welcome

to stay and participate again, but you don't have to.

MR. MOORE: Good morning. My name is Jim Moore. I'm president of the Alternative Fuels Division of Lone Star Gas Company here in Dallas. I'm appearing on behalf of the Natural Gas Vehicle Coalition, and also I'm appearing on behalf of our company that's in this business.

The coalition has more than 200 corporate members, and we believe that our nation must achieve energy security goals identified in the Energy Policy Act of 1992. I want to talk a little bit about energy security. Over the last 10 years, domestic crude production has fallen by 2.2 million barrels per day while the imports have risen by 3.1 million barrels per day. In the first six months of this year, the rate of decline of U.S. crude production has doubled.

DOE forecasts that by the year 2005, 60 percent of U.S. oil will be imported at a cost of nearly $100 billion. By 2010 the transportation sector is estimated to consume 14.1 million barrels per day, which is 9 million barrels per day more than is produced domestically. The U.S. transportation sector will consume nearly 15

percent of the entire world consumption of oil, and most of this oil will come from OPEC states, from Saudi Arabia, Iran, Iraq and Kuwait, the leading producers; so we obviously have an increasing energy security problem. So for these reasons I don't think that we need to review why the Energy Policy Act was passed, and I don't think we need to dwell further on current events in the Middle East to point out why a strong energy policy is essential. We simply cannot afford to allow another major oil crisis to catch us unprepared.

The environment. In addition to our energy security problems, the increased use of gasoline and diesel fuel present a compelling challenge to our goal of clean air. The DOE has reported that transportation energy use is the nation's largest source of air pollution, with highway vehicles accounting for 26 percent of the U.S. emissions of volatile or organic compounds, 32 percent of oxides of nitrogen, with these two being the principal precursors of ozone pollution in urban areas, and 62 percent of total carbon monoxide emissions. Here in the Dallas/Fort Worth area, for example, two-thirds of our pollutants come from vehicular sources, and we're just before

being reclassified from moderate to serious ozone level attainment.

The EPA is in the process of preparing deficiency and noncompliance notices to many states regarding their failure to achieve Clean Air Act milestones for reducing ozone pollution, and more specifically, a recent study estimated that there were more than 60,000 premature deaths each year related to particulate emissions from the use of diesel fuels.

So unless we want to annually send $100 billion abroad mostly to OPEC countries, unless we want to remain highly vulnerable to another devastating oil embargo, unless we want to continue to spend millions of dollars in military expenditures to protect oil imports and unless we want ours and our children's lives adversely affected by continued high levels of ozone and other kinds of pollution, we must get serious and act now.

And I want to make a case now for natural gas. 87 percent of the natural gas consumed in the United States is from U.S. sources. The remainder is largely from North American sources. With increased use of this domestic product, we'll see

domestic jobs creation. And there is ample gas supply for this endeavor. Two million NGVs, for example, would increase gas consumption by only five percent.

Natural gas vehicles are clean. Vehicles dedicated to run on natural gas produce emissions far below the standards set for a number of pollutants, including carbon monoxide, reactive hydrocarbons and particulates, and NGVs are far cleaner with respect to a number of so far unregulated pollutants such as toxics.

NGVs are not a new exotic technology. In fact, in many cases they are the vehicles that we drive today: Chrysler minivans, Ford Econoline vans, the Contour, the Civic and other popular models and types. And they are becoming more and more consumer friendly. On a national basis, with over 1100 public fueling sites and three new sites added each week, the infrastructure is growing.

Now, I just want to briefly talk a little bit about what we're doing here in the D/FW Metroplex at Lone Star. We have 23 public and private stations with five more under construction as we speak. We have about 3,000 natural gas vehicles on the roads in Dallas/Fort Worth, and our

in CNG consumption is increasing annually.

This all sounds good, but you know what? We're still not making money, and I think this is true of our entire industry. Why? Because we cannot get to the critical mass level that is essential to make this a commercial business. So I want to briefly talk about some barriers to the commercialization of the whole alternative fuels business, not just natural gas.

The biggest one, I think, is incremental cost difference. Whether we convert vehicles to run on alt fuels or whether we buy them from the OEMs, there is a substantial cost difference that precludes almost any economic case other than very high fuel use applications. This cost difference leads to an absence of sufficient demand to support mass production.

We also have a barrier of the failure of the federal government to provide the lead market. And then we have the bizarre tax policy related to LNG. This clean domestic fuel, which is simply natural gas in liquid form rather than gaseous form is taxed at a rate nearly twice that of dirty imported fuels.

So what can the government do to help?

Mainly provide economic incentives. We don't support mandates either, but we think economic incentives are the way to go, economic incentives that in the end will return more to the government than they cost. This is new revenue from increased domestic economic activity and lower expenditures for pollution related health problems.

The amount of financial support required from the government will be more than offset by reduced environmental, health and energy dependence costs and is only a fraction of the amount of money that would be spent if we're faced with another oil crisis.

And we're not talking about funding these fuels indefinitely. Once economies of scale are achieved, the incremental cost of developing alternative fuel vehicles will come down. So what we're really talking about, I think, is a five-or-six-year push to make this a reality. The government can support R&D efforts in partnership with the private sector, and that government can set the tone for the nation that we must together reduce dangerous levels of oil imports.

So what have we said? The private sector is prepared to invest literally billions of dollars

in natural gas vehicles and other alternative fuel vehicles and the related infrastructure. We're well on the way now. But this investment will ultimately depend on whether the government will be a partner in the early risk associated by this market. Without federal support in the form of economic incentives, a commercial alternative fuels industry will not develop. The higher incremental cost and market impediments will not be overcome, and the things that we heard this morning about the technology issues that are real will not be overcome.

So the government must support alternative fuels at least until the market price of transportation fuels adequately reflects their true cost in terms of energy security, environmental quality and economic stability. The incentives that we call for will pay for themselves in a very short time. We urge your help. Thank you.

MR. RODGERS: Thank you very much, Jim. One question for you. We heard some comments about infrastructure and refueling. Is it your impression as an energy company that we could provide the infrastructure needed to meet the

requirements of fleets and other users of alternative fuels.

MR. MOORE: I think if there are proper economic cases to be made, I think that fuel providers such as Lone Star Gas Company in the metropolitan areas will provide the infrastructure.

Now, this lends itself to fleets. I don't see in my few short years left in my corporate life this getting out to the individuals to drive across the country, but I think certainly the infrastructure in our major cities where most of the pollution occurs will not be a problem.

MR. RODGERS: Okay.

MS. LEWIS: I'd like to ask you a question, I think, on page 10 of your comments here. You're talking about what the government can do as far as incentives. One of the things that keeps running in my mind when I hear you and other people talk about our programs, we're targeting -- I should say Congress targets certain groups, state governments, and now we're targeting fleets, private fleets, local government. But one of the things I don't hear people really talk about is if we the public see alternative fuel vehicles out

here on the road and we understand the benefits that we receive, energy security, et cetera, et cetera, then if you, the fleet owners, are buying the vehicles and we, the public, don't see problems occurring with these vehicles no more than we see with our own vehicles we have now, the conventionally run ones; then the public, it seems to me, would be very much interested in purchasing these types of vehicles when they understand the purpose of buying a vehicle such as natural gas, propane, methanol and so forth.

But I don't hear that thread coming from these entities that come under the program, and I think that was the intent of Congress. If we get these vehicles out there, we're going to create markets, create jobs, additional jobs and so forth, but more importantly we're creating inner security, as the first speaker indicated, that we won't have to send our boys and girls over to some country to defend some oil field and so forth. But when we get to that point, I think we'll be much better off.

That's just a comment that I'm making, not saying that this is the way that everything should be run, but I just think that I don't hear

that coming from fleet operators or providers or what have you. I understand the business point of view.

MR. MOORE: Let me address that, and we're concentrating mainly on fleets from a central location. But to the extent of marketing to the moms and pops of the world, what will work will be bifueled vehicles, and the OEMs produce bifueled vehicles. It could be bifueled natural gas and gasoline, so that if I start to Houston and I run out of natural gas, it switches automatically to gasoline. I still have fuel, and I run on gasoline until I get to another fueling station.

I don't see the day when there's going to be alternative fuel stations up and down the highways like there is gasoline, not in my lifetime. That's why we're focusing on fleets, and I think that's where we can make the biggest bang for the buck right now from a pollution and environmental standpoint.

MR. RODGERS: Thank you very much, Jim. Our next speaker is Jeffery Horvath. Is Jeff here?

MR. HORVATH: Good afternoon. My name is Jeff Horvath. I am the chief executive

officer of the national biodiesel board, NBB. I come here today from Jefferson City, Missouri. The National Biodiesel Board is a stakeholder directed and funded organization dedicated to creating viable commercial markets for biodiesel in the United States and abroad. Farmers, fuel producers, engine manufacturers, academia and others volunteer their time and expertise to guide the NBB's investments in biodiesel research and market development.

I am here today to discuss biodiesel, an exciting renewable alternative fuel for diesel engines that is derived from various feedstocks, such as vegetable oil, rendered animal fats and used cooking oil. I will also explain why a 20 percent blend of biodiesel with diesel fuel, known as B20, can and should be included as a separate alternative fuel under the Energy Policy Act of 1992.

B20 will allow municipal and private fleets greater flexibility to comply with the third phase of the alternative fuel transportation program. Increased use of biodiesel and B20 will be good for the environment, good for the farmers, good for the economy and will augment the ability

of regulated fleets to meet the goals of EPACT. Including B20 as an EPACT alternative fuel is directly aligned with the congressional intents of EPACT. Biodiesel alternative fueled vehicles offer a cost-effective means of compliance with many of the provisions of EPACT, and biodiesel is complementary to both the diesel engine manufacturers and petroleum company interests.

Biodiesel provides additional opportunities for economic development through the sale of its various feedstock commodities and construction of biodiesel production facilities. All in all, biodiesel and B20 can and should play a major part in meeting the goals of EPACT.

Biodiesel is the generic term for a cleaner burning ester-based fuel for diesel engines that is derived from renewable organic oils, such as soybean or rapeseed oil. While the biodiesel industry is relatively new in the U.S., biodiesel has been used in Europe on a commercial basis for many years.

Under current EPACT regulations, by the year 2001, 75 percent of all affected federal and state government vehicle purchases and 90 percent of all affected fleet vehicle purchases by private

and alternative fuel suppliers are supposed to be alternative fueled vehicles. Future EPACT regulations will extend similar vehicle purchase requirements to municipal and other large private company fleets starting in the year 2002.

When the Department of Energy first published its EPACT regulations in February of 1995, there were few provisions that would benefit biodiesel. To correct this the biodiesel industry asked DOE to amend these regulations and allow for greater involvement by biodiesel and biodiesel alternative fueled vehicles. DOE was asked to include B20 as a separate alternative fuel under EPACT; however, DOE has so far declined to include any biodiesel/diesel blend, such as B20, as an EPACT alternative fuel in the final regulations.

On September 10th of this year the National Biodiesel Board and 23 other copetitioners presented the Secretary of Energy, Hazel O'Leary, with a 99-page petition asking DOE to include B20 as an EPACT alternative fuel. We strongly believe that we have put together a solid case based on scientific research, legislative history, consumer support and demonstrated benefits of B20 that will clearly justify a DOE decision to include B20 as an

EPACT alternative fuel.

First, biodiesel has important environmental benefits. Biodiesel is registered with the Environmental Protection Agency as a fuel and a fuel additive. Scientific evidence demonstrates that B20 reduces harmful exhaust emissions compared to other conventional diesel fuel. Today, nearly 6 billion tons of carbon dioxide and other heat-trapping greenhouse gases are released into the atmosphere every year. The United Nations Intergovernmental Panel on Climate Change estimates that the average global surface temperature may rise by as much as 3.6 degrees Fahrenheit by the year 2100 if greenhouse gases emissions are not controlled. This would cause a significant alteration in the current climate patterns.

Designating B20 as an alternative fuel would address several concerns related to the global effects of climate change presented in the United Nations report as well as help meet President Clinton's national goals for the net reduction of greenhouse gas emissions outlined in the administration's climate change action plan. As a renewable fuel derived from organic materials,

biodiesel and blends of biodiesel, such as B20, reduce the net amount of carbon dioxide in the biosphere.

In May 1996 a NESCAUM review panel examined an estimate of the potential displacement of carbon dioxide that could be achieved by utilizing B20 with catalytic exhaust aftertreatment of buses of just 12 major urban bus transit systems in the northeastern corridor United States. The NESCAUM review panel examined these estimates as part of the process for approval of a protocol to generate discrete emissions reduction credits using B20. The protocol examined and approved by NESCAUM demonstrated that utilizing B20 in these 12 bus fleets could produce more than 30,000 tons of carbon dioxide reductions annually.

Secondly, B20 has substantial economic development and national energy security benefit. A renewable fuel like biodiesel offers farmers and other feedstock producers stable, long-term markets for efficiently produced agricultural products. Biodiesel also means jobs and local tax revenues from processing a greater portion of our domestic agricultural products here in the United States. Use of domestic biodiesel improves national energy

security by directly displacing this imported energy.

Third, including biodiesel as an alternative fuel fits squarely with the original intent of EPACT. When EPACT was considered in 1992, legislative history shows that Congress clearly intended that EPACT should be fuel neutral. Fuel neutral simply implies that there should be no presumption in the law of favoring any particular alternative fuel over another as a means of compliance with the goals of EPACT. Congress incorporated fuel neutrality into EPACT to give regulated fleets the flexibility to decide which alternative fuels and vehicles are most compatible with their operations. Therefore, if we examine this issue on the basis of consumer choice for alternative fuels and vehicles, B20 would be determined an appropriate EPACT alternative fuel.

To date, B20 is our most popular biodiesel fuel blend tested with major diesel consumer and engine manufacturers. B20 provides many of the environmental and safety benefits of pure biodiesel at a fraction of the cost. B20 is also compatible with existing diesel engine maintenance and refueling facilities. Thus,

there's an adequate infrastructure in place to support B20's immediate use. More than 10 million miles of actual in-service pilot programs have been conducted using B20. Several national trade associations representing major and private diesel consumers, including the American Trucking Association and the American Bus Association, have endorsed including B20 as an EPACT alternative fuel. For these reasons, B20 should substantially increase the number of alternative fueled vehicles available to meet the requirements of the EPACT program.

Additionally, the National Biodiesel Board believes that the designation of B20 directly supports the replacement fuel program goals of EPACT Section 502(a) and (b). Conversely, NBB also believes that failure by DOE to designate B20 as an alternative fuel would not only contradict the stated goals of 502(a) and (b); it would also make the achievement of these goals significantly more difficult and more expensive.

Specifically designating B20 as an EPACT alternative fuel meets the goals of the replacement fuel program in the following ways:

Designating B20 as an alternative fuel

will allow greater opportunity for compliance with the fleet AFV requirements. Designating B20 as an alternative fuel will allow for greater accuracy in assessment as to whether existing voluntary and mandatory programs are sufficient to meet replacement goals.

It will allow for greater utilization of fuel-efficient biodiesel-compatible diesel technology in government and regulated fleets, thus increasing the capacity to utilize domestically produced biodiesel in fleet vehicles while mitigating some of the risk associated with future uncertainty in price and availability of petroleum fuels.

Designating B20 as an alternative fuel will encourage the state and local alternative fuel programs to utilize more biodiesel in their programs, and it will provide a measurable benefit to the environment, economic development and reduction of greenhouse gas emissions.

In conclusion, in March a special awards ceremony in Chicago. This was an important milestone for the biodiesel industry. The Secretary of Energy, Hazel O'Leary, personally presented an Energy Pioneer Award to the Columbus

Foods Company, a family owned and operated business that specializes in the packaging, sale and distribution of vegetable oils for restaurants and their customers. Secretary O'Leary honored Columbus Foods for their commitment to construct a state-of-the-art production facility that would convert would-be waste cooking oils and animal fats into environmentally friendly biodiesel.

All of us at the National Biodiesel Board were proud that Columbus Foods received this award, and we frankly believe that all of the pioneering entrepreneurs who have risked their time and capital to create the biodiesel industry in the U.S. deserve similar recognition. However, all the awards in the world to individuals or companies for their achievements in producing biodiesel aren't going to mean a thing unless there are viable commercial markets for our fuel.

The irony here is the Secretary of Energy has the authority under EPACT to do more than simply give our industry awards. She can give biodiesel a fighting chance to compete for its share of the alternative fuels markets created by EPACT, including the municipal and private fleets addressed by the advanced notice of public

rulemaking, simply by initiating a rulemaking process to include B20 as an EPACT alternative fuel.

Including B20 as an EPACT alternative fuel will benefit the environment, farmers, the economy and the municipal and private fleets that must comply with EPACT. It would also be in keeping with the goals of the replacement fuel program and the basic spirit and legislative intent of EPACT. It is a proposal that's a win-win for everyone.

I'd like to thank you for the opportunity to address these issues today. I would be happy to answer any of your questions.

I would like to point out a couple of things before I go on, some of the points that were made today:

Biodiesel does not require an infrastructure change. You can use existing facilities that are out there right now. With all due respect to my brother from St. Louis, because I've worked long and hard on research programs with biodiesel, and my state has nearly a million miles of operation with our buses using their existing facilities for fueling. The power and range issues

are not an issue. It's the same as you would get with a regular diesel engine. The availability of models of vehicles is the same as it would be for any other diesel product.

The number one barrier of infrastructure is -- I guess what I'm trying to talk to is really not a barrier. Blended fuels like B20 provide the economics that today biodiesel has been greatly challenged with.

MR. RODGERS: Thank you very much.

MS. LEWIS: I don't have any questions.

MR. RODGERS: Okay. Thank you. Our next speaker is Tom McDonald. I would just like to make a general comment. Right now we are running about a half hour behind the printed schedule. We will hear everyone's comments. As your public servants, we will be here all day if necessary to hear you, but we will not be taking a lunch break. So if you do need to get some lunch and you're on the schedule for later, I welcome you to do that, and we will work you in, so I appreciate that. Tom, thank you very much.

MR. McDONALD: Thank you. Good morning. My name is Tom McDonald, and I'm the

energy and tax issues manager for the North American Marketing and Refining Business Operations of Mobil Oil Corporation. Mobil oil has significant interest in the Department of Energy's proposed private and municipal fleet rule. We operate vehicles in the state of Texas and throughout much of the United States. Additionally, the proposed rule could have significant adverse impacts on many of our fleet customers in both the private and local government fleet sectors.

Let me open by explaining that Mobil Corporation subsidiaries and affiliates are not just oil and petroleum producers. Some are energy producers and fuel suppliers capable of supplying energy needs in many forms to meet the demands of industry and the American public for the foreseeable future. We and other major integrated energy companies have large reserves of natural gas. Methanol is made from natural gas. Propane is a by-product of the oil and gas production process as well as petroleum refining process.

Mobil Oil and many other companies have test-marketed and are test-marketing alternative fuels like M-85 in California and CNG, or

compressed natural gas, in many other areas. Mobil Oil also uses ethanol as an oxygenate in markets where it makes economic sense.

Alternative fuels can be useful and sometime economic, especially for niche markets like high-milage fleets that are capable of being centrally fueled. We do not oppose the use of alternative fuels and utilize these fuels when the economics are favorable.

Mobil Oil has many specific comments to the notice of proposed rulemaking, which we will detail in our written comments. Today I'll highlight some of the major concerns.

Mobil Oil Corporation opposes mandates and subsidies for alternative fuels. Mandating specific fuels and vehicles or the subsidization of selected fuel-vehicle combinations provides little or no service to anyone except for the individuals that sell them. Collectively, alternative fuels are not currently cost-effective. If they were, the market would already have recognized this and moved to fulfill the demand for them.

We believe that all fuels should compete on a level plying field. DOE's advanced notice of proposed rulemaking for private and municipal

fleets could result in a mandate for fleets to purchase or lease an ever-increasing percentage of alternative fuel vehicles or AFVs. In effect, this is an unfunded mandate for alternative fuel use with absolutely no credibly documented cost-benefit analysis.

Some might point to DOE's Phase I report of the 10/30 study as proof of alternative fuel benefits. To those who cite this report as proof, I urge you to take a closer look at the report. The report assumes that by 2010 alternative fuels and the vehicles that run on them will be widely available and cost-competitive with conventional fuels. That is quite an assumption. If AFVs and their fuel were cost-competitive, why wouldn't 50 percent of the market be buying them already? Why would a fleet mandate even be necessary?

What is missing from the report is what it might cost private businesses, U.S. taxpayers and the economy itself to make a reality out of DOE's generous assumptions. In essence, what the report does is extol the purported benefits without regard for the costs.

Incidentally, the largest share of the reported benefits of expanded AFV use is from what

DOE attributes to an increase in consumer satisfaction resulting from an increase in a choice of fuels and vehicles. What choice? The proposed rulemaking that prompted this hearing is not about choice. It's about mandates.

DOE is in the process of conducting Phase II of the study, which purportedly will estimate the cost of achieving the assumptions made in Phase I. While examining the cost is commendable, we find it inequitable that the Department chose to release Phase I of the report, which extols the benefits, without first examining the costs so that a true and fair evaluation could be made.

Let me switch gears for a moment and talk about the law behind DOE's advanced notice of proposed rulemaking. The statute shows that Congress intended that a private and municipal fleet rule would only be promulgated if the Secretary of Energy could make several affirmations to Congress. One of the affirmations that must be made by DOE is that the 10 percent and 30 percent replacement fuel goals contained in EPACT were practical and actually achievable. The Act's goals include a requirement that 50 percent of the

replacement fuels be from domestic sources.

We question the practicality of the 30 percent goal and also would like to point out that DOE's own Phase I study that I referred to earlier indicates that if a significance displacement of petroleum occurs in the transportation sector, it is likely to come from imported liquefied petroleum gas or imported methanol. Trading imports of one fuel for another does not seem to provide any benefit to national security, especially when the likely sources of propane and methanol are identical to the sources of petroleum.

Additionally, we believe that the benefits attributed to the increased use of alternative fuels are overstated. An American Petroleum Institute analysis shows that no AFVs currently pass the cost-benefit test under reasonable assumptions for AFV and alternative fuel costs versus the claimed benefits for environment and energy security.

For municipalities this proposal amounts to an unfunded mandate that would require them to purchase alternative fuel vehicles when even the federal government has struggled to meet its own alternative file vehicle goals set forth in the

Act.

Our country's experience with programs like EPACT mandates that allow the government to intrude into the marketplace is not good. One does not have to go back far in history to find examples like the Synthetic Fuels Corporation of the 1980s or the price controls of the '70s. The difference is that DOE has an opportunity to correct this mistake before the proposed mandate is implemented and the public and private sector are forced to spend valuable capital on an inefficient and unnecessary program.

DOE has options other than mandating that municipalities and private businesses buy expensive AFVs in order to reach a goal that is neither economically attainable nor practical. Congress envisioned such a possibility when EPACT was written. Section 504 of that statute allows the Secretary of Energy to modify the replacement fuel goals downward and to extend the deadline by which those goals must be met, if the original goals are deemed to be technically or economically ill-advised.

We oppose any attempt to force our economy to meet the original goals of EPACT if that

action disregards the costs involved. We urge the Department to instead expend its energy on doing a scientifically sound peer-reviewed assessment of the true costs of increased alternative fuel usage. We feel confident that if the study is done in an unbiased manner, the results will demand that the replacement fuel goals be lowered and the timetables for meeting those goals be extended as allowed under the law.

In summary, we believe that any confidence that the Department has about the feasibility of attaining the original replacement fuel goals in EPACT without resulting in significant adverse impact on the U.S. economy is a misplaced confidence. Those who claim that the regulated businesses and municipalities will not have difficulty meeting or could even exceed the program in the advanced notice of proposed rulemaking will either have few, if any, vehicle acquisition obligations or are alternative fuel suppliers who stand to gain by a mandate.

Such mandates and subsidies for alternative fuels are unnecessary and costly for the consumers and taxpayers. When these fuels become economic on their own, broader markets will

naturally develop. In the meantime, efforts to try to encourage more widespread use of alternative fuels should be voluntary.

Thank you for the opportunity of sharing our views at this hearing.

MR. RODGERS: Thank you, Tom. Vivian, do you have anything?

MS. LEWIS: Yes. On one hand it seems you're saying we should not have mandates?

MR. McDONALD: Correct.

MS. LEWIS: But on the other hand, I think -- where is it? On page six you do indicate that the Act allows the Secretary to down -- to decrease the goals as well as the acquisition requirements.

So you're saying that if our report comes out and indicates that we do need some type of program in place, then you would support such a program?

MR. McDONALD: No. What we're saying is I think if the economic analysis is done in an unbiased manner that a reasonable goal and a reasonable timetable for meeting those goals will determine that, as some of the fleet associations have testified today, mandates are not going to be

necessary; that the markets will develop naturally.

I also indicated early in my statement that there are niche markets for alternative fuels, high-milage, centrally fueled fleets, and there have been studies done by the Department of Energy as well as individual, outside consulting firms that show that there are fleets where, for instance, natural gas is economical because of -- I forget which fleet association testified, but they were talking about somewhere in the vicinity of 35 cents to 40 cents per gallon less for fuel; which if you drive enough miles, that will pay back. And if you have central refueling, rather than relying on the public infrastructure or publicly available infrastructure, you can pay it out.

MS. LEWIS: Thank you.

MR. RODGERS: I just have one question, Tom. We've heard that the Transportation Secretary is very dependent on petroleum now, and we heard some folks talk about reliance on imported oil. I guess I would like to know Mobil's position on what kind of programs we could have that would help us meet the Energy Policy Act goals in particular to protect the American consumer from

upswings in the price of gasoline. And I guess a follow-on would be do you think that alternative fuels adding a little competition to the transportation sector could help protect the consumer from gasoline price upswings?

MR. McDONALD: Well, one of the things I would say in answer to the price upswings is that petroleum -- and I'm not speaking of the end product gasoline, but petroleum is a globally traded commodity. The price of oil is going to move naturally with the market. It's not necessarily impacted any more by the United States than some other country that uses or several countries that use an equivalent amount, because we do use a lot. But that price is going to move globally.

I don't think that you're going to find significant moves in competition from other alternative fuels simply because it's being displaced. That petroleum will seek a level, a fair market level based on use throughout the world. If we are using more alternative fuels here, then the oil will be used by other countries.

That kind of has to tell you something.

If alternative fuels are economic and if they are such a good deal, then why isn't the rest of the world moving to them as well? You have countries that use alternative fuels today. Netherlands uses a lot of propane as a vehicle fuel, but the difference is it is cost-competitive there with gasoline and diesel. It's a market thing. It's a market-driven issue.

And someone else made the statement -- and I forget who it was. It may have been the gentleman from Lone Star that indicated that the -- I'm sorry. I lost my train there. I'm sorry. I lost that one.

MR. RODGERS: We'll let you edit that for the record.

MR. McDONALD: Okay.

MR. RODGERS: No further questions. Thank you very much, Tom. Our next speaker is Mr. Wehman.

MR. WEHMAN: Good morning.

MR. RODGERS: Good morning.

MR. WEHMAN: I am here on behalf of the Petroleum Marketers Association of America, the PMMA, and the National Association of Texaco Wholesalers, NATW. Can you hear me all right?

This is not for a normal-sized person to speak into the microphone.

I'm Bubba Wehman, and when I appeared before you in Washington, one or two of you took note of my nickname; and I will admit that I'm probably out of place with that nickname in Washington, but I'm in Texas now, and Billy Bob and I are really pleased to welcome both of y'all to Texas.

MR. RODGERS: Thank you very much.

MS. LEWIS: Thank you.

MR. WEHMAN: I am president of PMMA, I'm a past-president of NATW, and I'm also president of my company, Wehman, Incorporated. PMMA is a federation of 42 state and regional associations throughout the United States. It represents nearly 10,000 independent petroleum marketers. These marketers distribute over 40 percent of the gasoline sold in the United States and 50 percent of the diesel. They also distribute propane, and many are now selling and distributing other alternative fuels, such as natural gas, ethanol and methanol. Wehman, Incorporated is a full-line petroleum distributorship marketing both Texaco and CITGO product lines in metropolitan and

rural Texas.

We're deeply concerned with the proposal and the Department's consideration of a mandate for alternative fuels for private fleets. We continue to believe that mandates for private as well as local government fleets are improper and harmful to the economy. We believe that the Department of Energy should initiate proceedings to delay the imposition of a rule requiring alternative fuels in private fleets and should consider initiating steps to prevent the imposition of an alternative fuel mandate.

First, we would like to note that industry reports indicate that the proven supplies of oil is sufficient for approximately 45 to 50 years. Estimated reserves would add approximately another 45 to 50 years. Thus it is possible that there will be sufficient reserves to last through the next century. Improvements and efficiency may extend that significantly.

Given the state of technology in 1896 versus today, it is clear that we cannot anticipate the technological innovations that may occur over the course of the next century, which will have an impact on oil reserve, efficiency and demand.

We believe that this evidence is sufficient to show that there will not be a need to convert to alternative fuels to avoid shortages of oil. We believe that this evidence is sufficient to encourage the Department to delay consideration of an alternative fuel mandate for many years.

We also believe that this evidence shows that the primary and perhaps strongest motivation for this rulemaking is unfounded. Forcing private industry to pay additional sums to buy more expensive vehicles and more expensive fuels is unnecessary. When these alternative fuels and their vehicles develop, and if they are more efficient and more capable than petroleum-based vehicles, private industry will rush to utilize the vehicles. And I suspect that my company along with others like me will rush to ensure that we are supplying fuel to those customers.

Section 507(g) indicates that nothing in this title should be construed to require any fleet to acquire alternative fuel vehicles or alternative fuels that do not meet the normal business requirements and practices and needs of that fleet.

This provision is contrary to the fleet

mandate since fleet operators choose vehicles based on use requirements as well as the likely resale value of the vehicles. A fleet mandate almost by definition cannot conform to this requirement and, therefore, cannot be considered since such a mandate for a vehicle that can only be refueled in particular areas will greatly restrict the resale value of that vehicle.

A secondary issue involving an alternative fuel mandate is its potential impact on the environment, and the Department is considering its potential impact. First, we would note that electricity is classified as an alternative fuel; however, in many areas of the country, electricity is manufactured from the combustion of petroleum products. We are skeptical of how burning a higher volume of oil at power plants to produce electricity will lessen our dependence on oil. In fact, we cannot find a logic to support this view.

Another alternative fuel is liquefied petroleum gas. Again, this fuel is often manufactured from petroleum. How does converting people to this fuel save oil or increase energy security?

The effect on the environment of using

these alternative fuels is uncertain, and in some cases may be adverse. A recent report published in "Environmental Science and Technology News" details the potential impact that a major conversion to electricity would have on the environment. It found that it would have very little impact on the environment and the risk of increased lead production and consumption is uncertain.

One of the most significant environmental achievements of the past 20 years is the elimination of lead from common use. Paints are no longer manufactured with lead, and gasoline no longer contains lead. These achievements have had a significant positive impact on children. Unfortunately, residual lead is still in the environment, and many children continue to be exposed to this residual lead.

Is it a wise policy to dedicate significant government and private resources to increase the amount of lead in the environment? Do we really need to harm the next generation of children in an illconceived effort to save a resource that does not need saving? Can we afford to wait until technology and science provide us

with a battery that would not cause this type of harm to the environment? We believe that at a minimum a substantial delay in the program would allow these issues to be addressed.

Finally, an effort to convert one part of the fuel consuming universe to alternative fuels is somewhat anachronistic. The deregulation of natural gas and electricity has spurred innovation in the use of fuels and their distribution. In fact, many marketers are now entering into the business of marketing these fuels. Unfortunately for them, no one is mandating a particular fuel for a particular customer and that the customer buy it from them. Instead, they must find the best fuel for the customer at the best price, and they must deliver it to them efficiently. The actions of the Department of Energy would likely mean that these efficiencies would be reduced.

In today's new energy environment, fuels are being sold by the BTU. As a result, customers are buying fuel based on the cheapest BTU. As a result, the price differences between the competing fuels is likely to be small. This parity will ensure the customer uses the right fuel for the right purpose. Forcing the market to a particular

fuel prematurely will distort the benefits and may lead to the purchase of vehicles that are less cost-effective. A company that is forced to buy a particular fuel before its natural advantages are discovered will be harmful to that business.

It is extremely difficult for a business to be profitable, to maintain employment for its employees and to contribute society through the payment of taxes. Saddling these businesses with the additional cost to achieve an unnecessary goal could very well undermine all these goals. Given Section 507(g), we do not think that to be the appropriate course for the Department to take.

A further and final point is the impact that the present environmental movement will have on the need to encourage the use for alternative fuel. Currently reformulated gasoline represents a significant share of the market, and a significant part of reformulated gasoline is an alternative fuel. Reformulated gasoline is one of the most significant environmental achievements of this decade, and it has been shown to have many natural advantages over competing or alternative fuels. As a result, it is now under consideration for use throughout the Northeast and other parts of the

country. If reformulated gasoline does spread over much of the country, it is likely to result in significant use of alternative fuels in the United States. In this case, the environmental benefits would be clear and the use of petroleum will also decline. Why not determine how reformulated gasoline spreads before embarking on an ill-founded adventure in developing a new fuel supply and distribution system?

And I guess my only summation would be, as the gentleman from Biodiesel said, all of the impediments that you have with infrastructure are not impediments to what we're suggesting to you.

And we do appreciate the opportunity to appear before you, and if you have questions, I'll try to answer them.

MR. RODGERS: Thank you very much. I really appreciate you bringing up the questions and comments about reformulated gasoline.

As part of the Energy Policy Act, the nonpetroleum portion of reformulated gasoline and other gasolines is counted towards meeting the Energy Policy Act goals, and so I do have a question for you on that. Do you think that reformulated gasoline program should expand to the

entire nation outside of the specified areas in the Clean Air Act, and should the Department of Energy be considering actions to promote the increased use of reformulated gasoline as part of its Energy Policy Act programs?

MR. WEHMAN: I think that it is a much more logical way of attempting to address the alternative fuel issue than to go to something where you do not have a infrastructure already in place. And for that reason -- you know, I, again, don't think you could snap a switch and have it happen immediately, but I think an orderly transition towards that would probably be the logical way to go.

MS. LEWIS: I don't have any questions.

MR. RODGERS: Thank you very much.

MR. WEHMAN: Thank you. It's a real pleasure to be with you.

MR. RODGERS: Our next speaker is Mr. Frank Burcham. Did I pronounce that right, I hope?

MR. BURCHAM: Yes. Thanks. I was going to wish you good morning, but now it's good afternoon. My name is Frank Burcham. I'm

executive director of the Alternative Fuels Vehicle Network. It's a nonprofit fuel-neutral organization based in Albuquerque. It's a regional group supporting the expanded use of alternative fuels in the region. It counts membership in Kansas, Texas, Arizona, California and New Mexico right now, so it's a relatively new group, but it is spreading.

I'm speaking on behalf of that group as well as the City of Albuquerque, which was DOE's eleventh designated city, Clean City, on June 1st, 1994. They have been using clean fuels, primarily compressed natural gas, since 1988 mostly in light-duty vehicles, but we are now converting that to our entire transit fleet, the heavy-duty vehicles, to compressed natural gas.

And the third group I represent this morning is the Public Service Company of New Mexico, which is also headquartered in Albuquerque. It is the largest natural gas and electric utility in the state of New Mexico, and it has about 300 vehicles operating on alternative fuels at this time.

I only have six points. I'll be very brief in my comments this morning -- or this

afternoon, now, and just address those six points.

First of all, it is the City of Albuquerque's position, as well as the other two organizations, that alternative fuel vehicles play a very important part in the community's ability to obtain federal CO levels and are a key part of its clean air strategy, its maintenance strategy, and that the present strategy, present regulations and the time frame for the acquisition of alternative fuel vehicles under Section 507 of the Energy Policy Act of 1992 should be kept in place.

Two, these alternative fuel vehicle acquisitions and DOE requirements should be based upon the availability of OEM alternative fuel vehicles. The City of Albuquerque's preference is toward OEM vehicles, and in the past this has been a problem in acquiring those, unfortunately, because there hasn't been a sufficient number or type of OEM vehicles, alternative fuel vehicles, available for purchase.

Three, there's a definite need for continued federal assistance from funding programs such as ISTEA and CMAQ at the state and community level.

Four, there continues to be a great need

for support and guidance from DOE on a regional and state basis as clean corridors are developed throughout the country.

Five, many Clean City communities are in dire need of properly supported and funded coordinator positions. Hopefully, DOE may be able to assist in this area on a community, state or regional basis.

And last, six, the alternative fuel vehicle acquisition schedule should include medium and heavy-duty vehicles as well as the current light-duty vehicle requirements.

A closing comment to put everything in perspective, nearly 100 years ago the transportation industry faced a decision in transferring from one mobile transportation source to another. That was from horse and buggy to motorized vehicles. The main environmental issue in that case was horse manure, stepping in it, finding it on the roads and stuff. Well, unfortunately I think you're going to have to step around some horse manure on this issue, and I wish you luck in it. That concludes my comments.

MR. RODGERS: Thank you very much, Frank. I did have a question on your final point

related to medium and heavy-duty vehicles. In Albuquerque is it your experience that the folks who are considering using alternative fuels, are they looking at their entire program from light to medium to heavy-duty and they want to look at their entire fleet and not just be restricted to looking at only the light duties vehicles?

MR. BURCHAM: That's correct. As many of the speakers have brought up this morning, the economics, at least initially in the late '80s of and earlier '90s, the technology was such that most of the applications were light-duty vehicles, but the economics were not there.

Now as the technology is developing and different applications are becoming available on the medium and heavy-duty side that are really the high-fuel users, which is the bottom line for alternative fuels. That seems to be the direction, not the only City of Albuquerque, but other organizations are going toward.

MR. RODGERS: Okay. Thank you.

MR. BURCHAM: Thank you again.

MR. RODGERS: Thanks for coming all the way from New Mexico. Our next speaker is Sol Shapiro. Is -- I'm sorry. Sol's not here just

now, so we're going to move to the next speaker, Mr. Karl Rehberg. Thanks, Karl.

MR. REHBERG: Good afternoon. I'm Karl Rehberg from NOPEC Corporation, Lakeland, Florida. We are the country's first fully dedicated biodiesel producer. We are privately owned. My friends and I developed this company. It started out on my wife's kitchen counter about nine years ago. She told me I needed to find a job. She married me for love, not for lunch.

The reason we're here today is to let you know that biodiesel is very much alive and well. We have invested almost $20 million of our own money into the project, my friends and I. We have no government money involved in this. We have never applied for any grants or tax exemptions or special privileges. We want to show that this can be done without government subsidy, without running up debt. In fact, we have no debt in this company. We don't even have a car loan.

The term "biodiesel" is used as a generic term for methyl esters. A coproduct of our process is also glycerine, which is a very important commodity here. I'd like to also inform you that there has never been a diesel engine made in the

last 100 years that cannot use biodiesel without modification. There's not a diesel fuel tank in the ground that can't accept this fuel, and there's no other infrastructure modifications required.

Biodiesel burns clean. There's no sulphur in it contributing to acid rain. There's no benzene in it to contribute to carcinogens in the air we breath. There's no black smoke and no soot. A 20 percent blend of biodiesel will put any diesel engine in compliance with the Clean Air Act and EPACT. There are no barriers to infrastructure because there's no infrastructure to adjust. There's no special maintenance facilities necessary.

We make a lot of our biodiesel fuel out of recyclable materials, a great deal of it from restaurants. We have joined in an effort with the restaurant association, National Restaurant Association, the Florida Restaurant Association, Walt Disney World, and I can't tell you how much other thousands of restaurants, to be recycling their oil.

There's another factor that comes into this, and that comes in through the EPA's Resource Conversation Recovery Act, where a great deal of

the cooking oils from restaurants, for example, and there's billions of gallons of it -- I almost feel like Carl Sagan. There's billions of gallons of it, and the Resource Conversation Recovery Act states that this stuff can no longer be disposed of in landfills or be land spread. So a pumper goes to Burger King, picks up the grease there. He's driving down the street with it, and he has no place to put it; so he drives into McDonald's, opens up McDonald's grease trap and puts it in. McDonald's calls up and says, "My grease trap's full."

"Okay. We'll pump it."

He goes back to McDonald's, pumps it and takes it to Checkers, from Checkers to Denny's, from Denny's to Red Lobster. The only thing that's missing is the merry-go-round music.

When the grease winds up in the lift stations, the City has to clean it out, but then they go up the line from the lift stations until they find some restaurants and they assess fines on them.

At the restaurant association show in Chicago recently one gal got up there and said, "Let me tell you about some of this illegal

dumping problem. We have a Cracker Barrel restaurant on I-4 in Florida." She said, "They have not been open a year yet, but so far they've been fined $215,000 for excess grease discharge, and it's not their grease." Chili's restaurant, $41,000 so far this year. Burt Reynold's restaurant there in Lakeland was put completely out of business for excess grease discharge. Their fines were running between eleven and $15,000 a month.

We have found a way to solve that problem. We can eliminate that problem. We can eliminate the disposal problem. We take this grease and oil and turn it into clean-burning diesel fuel. We don't have to import this stuff.

Our coproduct, glycerin. Glycerine is something that everybody in this room has used today at least four or five times. You don't even know it. Shampoo, shaving cream, toothpaste. Toothpaste tastes good because it has glycerine in it. Shoe polish, fabric softener in your clothes. Your car wouldn't even run without glycerine, wouldn't even exist without glycerine. It's one of the most versatile chemical compounds known to man other than water.

And I bring this subject up because it's significant. It's significant in the fact that the United States is a net importer of glycerine. In 1992 the Chinese did not import any glycerine. Today they're importing 200 million pounds of glycerine because we have traded operations with the Chinese. But the result of that is the price of glycerine has more then tripled. This is a wake up call, and it's going to give you an idea that these other people in the other half of the world, between India and China and the former Soviet Union, represent half the earth's population, and they want what we've got, and they're willing to pay a price.

If you go back to the time of 1945, we had two and a half billion people on this plant and 50 million vehicles. 50 million vehicles, two and a half billion people. Today we have over five billion people and over 500 million vehicles. And when we get to the point where everybody has one, we don't have enough resources here to support that. You realize that today if every American went out and got in a vehicle, not necessarily their own, but if you just went out and got in a vehicle, nobody would have to sit in the back

seat?

So we think that the importance of having B20 recognized as a feasible fuel for vehicles that doesn't cost anything extra for the vehicle, doesn't cost anything extra for the infrastructure. It's already there. It can be blended at the terminals.

NOPEC has plans. We're putting new plants in South Florida, Atlanta, St. Louis, Kansas City, Omaha, Oklahoma City, Dallas, Texas. We're bringing one near you. We don't need any economic incentives. In fact, we give economic incentives to the communities that we go in because part of the proceeds that we get in selling biodiesel and the coproducts, we take and donate 10 cents a gallon to local schools for their school-to-work programs; through Rotary International for scholarships, school supplies or things like senior class trip to Washington, something like that. It's not to go for administrative costs. We sit down and have some very hard discussions with some of the school boards. We have six school districts in Florida now in this program.

We are having young people trained, for example, to get into the school-to-work program

through the Florida Restaurant Association so that these people can get better jobs than just flipping hamburgers. They can get some managerial jobs and see that they have hope for a future, not that they're going to go out on the corner and deal because they have no hope for the future.

We're looking to get these people involved. We even send buses to the schools, powered on biodiesel, and we have the buses pick up kids from the schools from their environmental and ecology classes, bring them over to our plant and show them, "Look at this crappy grease here. You pour some in here, you pour some in here and see what happens. See it separate? Now, I'm going to take this out and put it in an engine and see how it runs. Here's the bus that you came over here on running on the same thing. We'll pour some more in there." It gets them involved. It gets them to see that recycling and the environment is important.

I really appreciate the opportunity to be here today. Thank you. If you have any questions, I'd be glad to answer them.

MR. RODGERS: Thank you very much, Karl. Vivian, do you have any questions?

MS. LEWIS: No.

MR. RODGERS: We appreciate it very much. Our next speaker is Mary Miksa.

MS. MIKSA: Good afternoon. I'm Mary Miksa, and I'm vice president for governmental affairs for the Texas Association of Business and Chambers of Commerce. TABCC is a broad-based business association of 5,000 companies and over 200 chambers of commerce representing about two million Texas jobs. TABCC has been representing business and industry in Texas since 1922. While many of our members are large manufacturers, over 77 percent of our membership is composed of small business, those with 100 or fewer employees. Many of our members have private fleets which would be affected by the proposed EPACT program requirements.

In the last three years, TABCC has represented private fleets in regulatory and legislative efforts to enact the state Alternative Fuels for Fleets Program under the Clean Air Act, which culminated in 1995 with Senate Bill 200 and its subsequent regulations.

Using 1993 data the Texas Natural Resource Conservation Commission, our environmental

agency, has estimated that of the four Clean Air Act cities, nonattainment areas alone, Dallas/Fort Worth, Houston/Galveston, Beaumont/Port Arthur and El Paso, this program will impact 102,000 vehicles in over 600 fleets. Adding in the additional six areas affected by EPACT, San Antonio, Austin/San Marcos, Corpus Christi, Killeen/Temple, McAllen/Edinburg and Brownsville/Harlingen, that figure will increase to over 900 fleets and over 150 (sic) vehicles in Texas.

Of course, for EPACT you would have to add some vehicles and decrease some vehicles depending upon the number of fleets in the program, and you would also have to make an adjustment for the fact that the EPACT program only includes vehicles of up to 8500 pounds.

But at the same time, I think you have to take into account that the state population figures, fleet and vehicle figures are four years old. Since that time Texas has undergone population and economic growth at the rate of two to three percent; so I think the figures are going to be much higher. I also think we will see, if you look at 1996 population figures, additional cities be impacted by EPACT. But however you

figure it, there's no doubt that a large number of Texas businesses stand to be impacted by the EPACT program under consideration.

There is also no doubt that the Texas Alternative Fuels for Fleets Program will be economically burdensome for Texas private fleet owners, and I think you've heard some of the economics discussed earlier this morning by some other witnesses. Testimony in recent hearings on state regulations made it clear that private fleets will have a hard if not impossible time attaining the AFV percentages for the state program by the target dates. While the same program does include a two-year waiver on a case-by-case basis for individual fleet owners, this provision only delays a fleet's compliance by two years. It does not get rid of the requirement to be in the program. Adding another program, another level of bureaucracy and compliance, like EPACT, no matter how well-intended, will further add cost to private fleet owners.

Whatever the difficulties private fleets will have in complying with the state AFV program will be increased considerably by the hardships to be inflicted on fleet owners by the EPACT program

under consideration. In 1995 Texas fleet owners were successful in convincing our legislature that the original fuels under consideration in our state program, which included methanol, ethanol, propane, CNG and electricity, should be expanded to include any fuel which meets emission reduction levels, including RFG and diesel.

The inclusion of RFG and diesel gave fleet operators in Texas a degree of hope that they might be closer to compliance with the AFV program under the Clean Air Act, because it is predicted that at least RFG LEV vehicles might be generally available, at least at some point in the future. So with one hand, the Texas legislature gave us the possibility of RFG and diesel, and with the other, DOE proposes to take it away. I am only glad that DOE administrators and our Texas congressmen will be around to explain to our fleet owners in this state how one level of regulations allows them to purchase and use RFG and diesel fuel vehicles, while at the same time a different set of regulations prohibit RFG and diesel fuel use in AFVs.

On the goals of the EPACT program, I have read the technical report on market potential and

impacts of alternative fuel use, and I find it to be amazingly optimistic in its assumptions and, not surprisingly, its conclusions. Regarding the assumption that for the year 2000, 10 percent replacement of light-duty motor fuel use with alternative and replacement fuels is feasible and appears likely with existing practices and policies, I can only say that you must be contemplating using something approaching a heavy stick with auto manufacturers.

For those of us already burdened by the state AFV program, we have been unable to get even the most general estimates or projections much less commitments from auto manufacturers on which types of vehicles will be available by when.

The earliest list date for registration and to begin compliance with the Texas program is September 1, 1998. Since fleet purchasing managers must plan vehicle purchases, fuel supply and maintenance for up to two years ahead, you can imagine the fleet managers' frustration in attempting to comply with programs like this. And, again, although a waiver is available, it still only postpones the inevitable compliance for two year. History has shown us that absent a mandate

requiring AFV manufacture, the production of AFVs will not meet fleet demands, even when these demands are artificially driven by state or federal requirements.

The second assumption that the technical report makes that I take issue with is the assumption that by 2010, the transition to widespread availability of fuels and of alternative fuel vehicle availability will have taken place. Texas was one of the earliest states to enact an AFV program. We passed our original statute in 1989. Why, we were so foresighted, we even predated the Clean Air Act of 1990 that mandated such programs for states. And from the fleet operators' prospective, we learned the hard way that our alternative fuel suppliers dream great dreams of supply and availability but seldom deliver. Experience leads us to be skeptical of fuel suppliers or of government agencies who promise us alternative fuel vehicles for every garage and an alternative fuel station on every corner.

We recognize the difference in goals between the Clean Air Act alternative fuels programs of the states and the EPACT AFV program.

The AFV and Clean Air Act alternative fuels programs are directed towards emission reductions, while the EPACT program is aimed at conserving domestic energy resources. In some respects the Texas businessman doesn't really care. All he knows is that he now will have one more well-intended, complicated and costly bureaucratic program to comply with.

TABCC encourages the Department of Energy to think long and hard before imposing another such AFV program on private fleets, at least imposing it sooner than you have to.

I thank you for the opportunity to speak on this critical issue, and I am optimistic that you will listen to our concerns.

MR. RODGERS: Thank you very much for your comments. There's a lot of questions that I have from your testimony, but I don't think we can get into them all here. But let me make one comment and make sure -- the Technical Report 14 that you referred to in your testimony and the goal of 10 percent replacement fuel use by the year 2000, I just want to make sure that people understand that that report does not assume a heavy stick with the manufacturers because the

calculation of the different nonpetroleum components in gasoline, the use of propane in existing vehicles, the use of natural gas liquids does account for a significant portion of that motor fuel replacement by the year 2000. And I would be happy to provide more information on that at your request, as needed.

Vivian, did you have any questions?

MS. LEWIS: No.

MR. RODGERS: Thanks for taking the time to come up.

MS. MIKSA: Thank you, and I look forward to receiving that information.

MR. RODGERS: Our next speaker on the agenda, Mike Liljedahl, are you here?

FLOOR SPEAKER: He was detained.

MR. RODGERS: Okay. So we'll go to our next speaker, Mr. David Bragg.

MR. BRAGG: Thank you. I am David Bragg, and I am not from Little Rock, Alaska, as indicated on the agenda, but from Little Rock, Arkansas, the capital city to the northeast up here. I am fleet director for the City of Little Rock. Little Rock is a stakeholder in the Department of Energy Clean Cities Program. So far

we've managed to avoid clean air nonattainment status and we're attempting to take the necessary steps voluntarily to remain in compliance.

Availability of convenient fueling sites is a critical component to acceptance of alternative fuels. Driving across town to obtain an alternative fuel when gasoline is available nearby is not acceptable to my operating departments. As a matter of fact, my police chief is currently asking me to put in an additional gas station at his southwest precinct, which is only two and a half miles from our central maintenance facility.

We currently operate 13 automated gasoline and diesel dispensing locations disbursed throughout the city. To adequately service a significant portion of our fleet with alternative fuels would require the addition of alternative fuels to a minimum of four of these sites. Currently, there is only one commercial CNG site available in Little Rock. We've applied for a DOE demonstration grant, which included a CNG fast-fill fuel site for one of our locations. To my knowledge, that grant is pending.

We currently sell gasoline and diesel to

other government agencies at the same tax status as the city. As part or our Clean Cities commitment, we're willing to operate alternative fuel sites on a break-even basis for other government agencies, but we cannot afford the capital outlay to install the number of sites necessary to achieve reasonable convenience. Additional assistance from DOE for capital funding for shared facilities would greatly improve the acceptance of alternative fuels.

From an EPA presentation at the recent NAFA, and that's National Association of Fleet Administrators, convention in Chicago, I am concerned that the only safe approach for me to take to achieving long-range clean fuel vehicle certification with CNG is the purchase of OEM dedicated CNG vehicles. Further clarification of that issue, I feel, is needed. From this conference here, I'm still of that opinion, that there's no guarantee to me that converted vehicles, long range, will meet the Clean Air Act.

OEM CNG vehicles are not currently available in Little Rock. We have one Dodge pickup truck on order, but Dodge, as you know, has withdrawn from the market for 1997. We have been trying to purchase a CNG demonstration sedan from

Ford since early 1996, but they have been unable to certify a local dealer and, consequently, will not sell us the vehicle.

We have voluntarily taken a proactive position toward implementation of alternative fuels in the hope that mandates for local government could be avoided. At this point we have been unable to make any progress due to the lack of fuel availability and the lack of vehicle availability.

With the currently available technology, we believe that net lifetime cost of operating with clean alternative fuels versus gasoline or diesel will require significant budget increases, whether implementation is voluntary or mandatory.

MR. RODGERS: Thank you. Building on your last comment and what some other folks said this morning and incentives, have you given some thought or are you willing to share some ideas about what kind of incentives for local governments might help in purchasing alternative fuel vehicles or using alternative fuels?

MR. LILJEDAHL: I feel like my earlier comments regarding infrastructure -- if we could get the infrastructure in place, then I think our government, at least, is willing to fund the

incremental cost as our commitment to Clean Cities, but we simply cannot afford four or five -- if CNG is the fuel of choice, we cannot afford the million or million and a half or $2 million, whatever it would take, to give us these four or five facilities that I see necessary for my users to accept it.

MR. RODGERS: Okay. Thank you. Vivian?

MS. LEWIS: Yes, I would like to ask you a question dealing with our goals and acquisition requirements. It seems that everyone here, for the most part, is saying that we either should delay or not do anything. But if we go to a rulemaking, as I think I stated earlier, the Secretary has the authority to decrease the goals and the acquisition requirements. Do you have any suggestions as to these possible decreased numbers? And if you don't have that information, I would appreciate it if you could submit that to us so that we could put it in the record.

MR. LILJEDAHL: Okay. I think I can answer that best by going back to my comment that we see the problem as infrastructure. If we can get a local -- if we can buy OEM vehicles, which I

think the manufacturers will be forthcoming with, if you do a mandate, I think we can acquire the vehicles to come in compliance. But we cannot service them because we don't have -- if CNG is the fuel of choice, we don't have the ability to do it without severe inconvenience to our operating departments and additional cost.

MR. RODGERS: Thank you very much. Our next speaker is Mr. William Dermott. I would just like to point out that right now it's 12:40 by my watch. We have six signed-up speakers. If they each take their 10 minutes, which they're certainly allowed to do, we'll be here for another hour, and then we'll have our unscheduled speakers and opportunity for rebuttal.

If you do want to offer rebuttal or additional comment, please go to the back and sign up with Andi Kasarsky. Thank you very much. And, please, go ahead.

MR. DERMOTT: Good afternoon. I am Bill Dermott, manager of legislative and regulatory affairs for Exxon Company USA's marketing department. I do appreciate the opportunity to comment today on the advanced notice of proposed rulemaking.

The notice requests comments on various issues. There are two in particular that I'm going to try to address. The first is whether the proposed alternative fueled vehicles acquisition mandate should be promulgated. In brief, our view is that this rule should not be promulgated.

There are several reasons for that position. First, from a policy perspective, Exxon is strongly opposed to mandates and subsidies. Let me be clear that we are not opposed to alternative fuels and vehicles, per se. In fact, Exxon is a supplier of alternative fuels. For example, we are the largest holder of proved natural gas reserves in the United States and the second largest domestic producer. As a result, we're in an excellent position to benefit from any expansion of demand for compressed natural gas.

Nevertheless, we are strongly opposed to government mandates or selective subsidies for alternative fuel, because they are not justified in terms of either energy security or as a cost-effective way to reduce emissions. We believe that alternative fuels and alternative fueled vehicles should compete on an equal basis in the marketplace without mandates or subsidies. If the

fuels and vehicles become economically viable, their use will increase.

As others have said here this morning and this afternoon, we recognize there are some niche markets where some alternative fuels may be economically justified, such as in vehicles with very high annual fuel use and centralized refueling, but these potential markets are very limited in number.

Our fundamental concern is how the nation makes decisions about fuel use. Going about it in the wrong way could have an adverse impact on our entire economy, and anything that affects our economy affects each of us as businesses, individuals and taxpayers. Policy and business decisions on fuel use should be based on a rigorous analysis using sound science of the relative cost and benefits of each option. This approach will best serve us all in the long run.

We also disagree with the national security premises underlying EPACT's alternative fuel vehicle mandates and replacement fuel goals. We believe they are seriously flawed. The United States is a net importer of all major fossil fuels except coal. The Energy Information Agency's own

data shows that in 1995 the nation imported about 12 percent its natural gas, 6 percent of its LPG and 23 percent of its methanol needs. Any significant growth in LPG, methanol or natural gas consumption will lead to increased imports of these fuels with little or no energy security benefit with higher cost to consumers.

With regard to ethanol, the DOE's own studies show there is little energy security benefit from ethanol use. It takes about as much energy to make and distribute ethanol as is obtained from its combustion.

Furthermore, building a new and redundant transportation fuel infrastructure for each of the alternative fuels would add a significant economic burden to the nation and waste limited investment capital.

We also oppose promulgation of this rule for procedural and practical reasons. We strongly agree with DOE's conclusion that there is not enough time to complete the regulatory process. Following the advanced notice, the Secretary of Energy is to publish a proposed rule and provide a public comment period, including hearings of not less than 90 days in length. With the closing date

for written comments on the advanced notice of November 5, the statutory deadline of December 15, 1996 for completion of the early rulemaking cannot be met. This means that a rule affecting private and local government fleets cannot go into effect until model year 2002.

Another reason why the rule should not be promulgated is that DOE has not yet completed its study of the technical and economic feasibility of meeting the 10 percent and 30 percent replacement goals for 2000 and 2010, respectively. This study was to have been completed by October of 1993, almost three years ago.

Moreover, DOE was required in the Act to prepare a technical and policy analysis of various issues related to replacement fuels and alternative fueled vehicles for submission to the President and Congress by March of 1995. This analysis has not been completed.

It is reasonable to conclude from the magnitude and timing of the technical, economic and policy analysis that Congress appreciated that achievement of these replacement goals, especially for the year 2010, would involve substantial departures from the current vehicle and fuel

system. As a consequence, very careful analysis by DOE is required before the Department can make any decision on the fleet mandate.

This leads to the second issue in which comments were requested, and that is assessing progress toward the 10 percent and 30 percent replacement goals, identifying problems with achieving the goals and assessing the adequacy and practicability of actions necessary to meet the goals.

In this regard I would like to focus briefly on DOE's January of '96 assessment of cost and benefits, which is the first part of the analysis called for in EPACT. We do understand that the second part, which assess the cost and policy implications of making the transition to the replacement levels, is still being prepared. I think that's due out sometime next spring.

A few general points about the study:

First, DOE's analysis shows that achieving a 30 percent replacement of gasoline and diesel fuel in the year 2010 would require about 95 million alternative fueled light-duty vehicles or about 40 percent of the total light-duty vehicle population in that year. This is an

extraordinarily high level of replacement to reach in a relatively short period of time. DOE recognizes this in the report when it observes that, quote, "The market will not move toward such a scenario without government action." The report goes on to say that it would likely require a substantial commitment, probably including government driven mandates or incentives. As we have said, Exxon strongly opposes such actions because they do not serve the interest of the nation.

The study makes favorable assumptions, for example, that a complete refueling infrastructure for all alternative fuels has been established and economies of scale have been achieved for fuel and vehicle manufacturers. Under these highly optimistic conditions, a number of scenarios were examined. A particular note is a case that addresses long-term fiscal concerns by assuming that excise taxes are equalized among fuels to maintain constant tax revenue to the government. In that case, total energy imports in 2010 are calculated to decline by less than two percent, and greenhouse gas emissions do not significantly change as a result of alternative

fuel use.

We believe that the calculated economic benefits are overstated because they're based on optimistic assumptions and because a significant part of the benefit is from, quote, "increased consumer satisfaction." And, quite frankly, we do not understand how this consumer satisfaction is derived and whether it has any real significance.

Our point is simple. What the DOE is contemplating is an extraordinary transformation, undoing a century of market-driven motor vehicle and fuel evolution. It involves investing billions of dollars to install new refueling infrastructure to duplicate one that exists and is functioning well. It would ask consumers to spend many billions of dollars of additional cost to purchase alternative fuel vehicles for essentially no national gain.

It seems reasonable and prudent that DOE demonstrate large and unequivocal benefits to the nation based on a robust analysis before contemplating policy changes with such significant impacts. The benefits calculated by DOE fall far short of meeting this test.

We do have some additional comments on

the limitations of the study and responses to some of the specific questions in the ANOPR related to achievement of replacement fuel goals, and we will address these issues in our written testimony which we will have to you prior to November 5th.

In summary, Exxon believes that the early rule for private and local government fleets should not be promulgated. In addition, DOE's preliminary analysis of the 30 percent replacement goal raises serious doubts about its feasibility.

That concludes my remarks. Thank you.

MR. RODGERS: Thank you very much. Vivian, do you have something?

MS. LEWIS: No.

MR. RODGERS: Just one question, Mr. Dermott. You refer in your statement to "energy security" but not to exactly what "energy security" is, and I think it would help us tremendously if you could either tell us today or in your written comments what your company's view of what energy security is and how we might go about increasing it.

MR. DERMOTT: I would be glad to do that in the written comments for you.

MR. RODGERS: Okay. Thank you very

much. Our next speaker is Mr. Bob Looney.

(Interruption by the Reporter.)

MR. LOONEY: Good afternoon. I am Robert Looney, president of Texas Mid-Continent Oil & Gas Association. TMOGA is a trade association that represents all segments of the oil and gas industry operating in Texas. Our membership is large, exceeding 2,000 companies. It is also diverse, ranging from small scale oil and gas producers to 50 of the state's largest energy companies. Many of our largest members are among the premiere energy companies serving the nation and the world.

Our members account for 90 percent of all oil and gas production and 95 percent of the refining capacity in Texas. Given the dominant position of the state of Texas in the nation's energy industry, it is easy to understand the high level of interest that our members have in the subject of alternative fuels. This issue is extremely important to us, and is one that we understand well, which is why I'm pleased to be here today to represent our industry's views.

The advanced notice of proposed rulemaking invites comments on two topics. One,

should the DOE mandate the acquisition of alternative fueled vehicles for private and local fleets, and, two, what are the problems of achieving the alternative fuel goals of the Energy Policy Act of 1992?

Our view is that the DOE should not impose mandates and that achieving alternative fuel goals of EPACT would be highly problematic. On the first question, the members of Texas Mid-Continent feel very strongly what the federal government should not mandate the purchase of alternative fuel vehicles. We have no objection whatsoever to the sale or use of such vehicles. If fact, it is our members who produce natural gas and other fuels that would power such autos and trucks.

Our primary concern relates to the imposition of government mandates and subsidies. History shows that government mandates and subsidies disrupt and distort the marketplace. They impose inefficiencies which increase cost. Government mandates and subsidies are, therefore, inherently anti-consumer. Mandates remove choice and decision-making from consumers and place them in the hands of government regulators. The inevitable result is an artificial market with many

more losers than winners.

In the case of alternative fuel mandates and subsidies, the losers would include fleet owners, taxpayers, business owners and our road system. Fleet owners would be forced to purchase and utilize certain vehicles merely because the government regulation dictates that it be so.

Taxpayers would see their money used to subsidize construction of an elaborate alternative fuel infrastructure that is clearly not needed. Such a new infrastructure would overlap our nation's existing fuels infrastructure, an infrastructure that took decades to build and upgrade and serves the motoring public in a highly efficient fashion. Such duplication makes no sense.

The business community would see its costs rise as mandates impose inefficiencies on our transportation system. For example, a trucking company that operates in several states doesn't worry today whether vehicles can obtain fuel wherever they travel; but if forced to utilize alternative fuel vehicles, operations become less efficient and costs rise. The company is saddled with a new set of problems that didn't exist

yesterday.

Our road system would suffer if excise taxes on our alternative fuels were reduced to encourage their use. A 10,000-pound truck fueled with natural gas imposes as much wear on the highway as one fueled with gasoline. Maintaining roads requires income from fuel excise taxes. If tax revenues fall, so will the quality of our roads. That's particularly important in states like Texas where they're experiencing high growth rates in population. Texas faces the special circumstances of being the gateway to Mexico for much of the United States. If Texas roads deteriorate, it will be hard to achieve the benefits promised by the North American Free Trade Agreement.

With respect to the second question concerning problems of achieving the alternative fuel goals of the Energy Policy Act of 1992, those problems are many and varied. The prospect of achieving 30 percent alternative fuel use is, quite frankly, mind boggling. The cost of such an undertaking would be monumental, many billions of dollars.

DOE's own analysis concludes that such a

transformation would require the nation to have about 95 million alternative fueled vehicles on the road by the year 2010. That's 95 million alternative fueled vehicles versus less than one-half million today. That would represent about 40 percent of the total light-duty vehicle population in 2010. It is hard to fathom the degree of government intrusion that would be required to achieve such a transformation. And what would be the benefit? In our view, there would be none, none for the consumer, none for the taxpayer, none for the business community, none for the petroleum industry, none for our road system and very little, if any, for our nation's energy security.

Let me conclude by saying that the membership of Texas Mid-Continent Oil & Gas Association believes that our nation's transportation system works best when it operates in a competitive market environment. All around the world we see nations that formerly controlled all or parts of their economics through centralized planning abandoning those systems in favor of free market approaches. Those nations have learned through bitter experience that centralized economic

planning never works. No matter how careful and well-intended government regulators may be, they can never come close to matching the efficiency of the marketplace.

We hope the DOE will recognize the fallacy of trying to impose huge and, as yet, unidentified changes on our nation's fuels transportation system, a system that works extremely well and serves the best interest of the motoring public.

In summary, we believe the DOE should not promulgate rules mandating the acquisition of alternative fuels vehicles. In addition, we believe the DOE's preliminary analysis of the feasibility of achieving 30 percent alternative fuel use by 2010 is seriously flawed; therefore, that analysis does not provide a sound basis for any government rulemaking. Thank you.

MR. RODGERS: Thank you. Vivian, do you have any questions?

MS. LEWIS: No.

MR. RODGERS: Again, there's a lot of issues raised here in your testimony. I really appreciate you bringing them out. But I do want to touch on one question. I've heard this morning

many witnesses saying that we should avoid mandates and turn to incentives, but then I read in your testimony here that your group does not look favorably on either mandates or subsidies.

MR. LOONEY: That's true.

MR. RODGERS: So I guess what I was going to ask, then, is if we are going to implement a program to reach Energy Policy Act goals, what should we do to reach that? What can we do to try to improve our energy security?

MR. LOONEY: Well, I'm afraid my answer is that it cannot be met; the EPACT goals cannot be met without extreme mandates and subsidies. I personally -- and I think my organization feels like there will be alternative fuel development in the United States of America as the consumer wills it to be and on that time frame only.

As technology develops, the infrastructure will be there. I'm of the opinion that as technology develops and as the consumer confidence in the products and in the fuels develops, that my companies, Mobil, Exxon, Chevron, all the rest, will be part of the infrastructure that delivers that product to the driving public.

MR. RODGERS: Okay. One other question I had was I heard earlier this morning and, again, in your testimony about how our current transportation system does very well in serving the interests of the public; but yet I was also concerned with things I heard about air quality problems, health problems that are the direct result of that transportation system.

I also heard that reformulated gasoline was offered as a potential better solution than alternative fuels by folks in industries similar to yours, and yet at the same time I think my memory serves that reformulated gasoline was opposed by members of that same industry during the Clean Air Act debates.

So I guess what my question is leading to is the current transportation system, the one that we've got right now: Is that the best we can do? Is there nothing that needs to be changed in order to improve energy security and improve the air quality?

MR. LOONEY: Well, you brought up two or three points here, and anything can be improved. You know that. I was not part of the debate on reformulated gasoline, but I certainly

know that tens of billions of dollars have been invested in Texas alone to produce alternative fuel -- I mean to produce reformulated gasoline as an alternative fuel.

To say that it can no longer be considered an alternative fuel, after that investment was made, is patently not fair. It has proven to be a tremendous fuel, a very clean fuel, and the next generation will be cleaner still. I am not a transportation expert, but I know that fuel has worked.

MR. RODGERS: Okay. Thank you very much for your comments. Our next speaker is Mr. Tom Henderson.

MR. HENDERSON: Good afternoon. Thank you for your patience. I'm Tom Henderson with the Texas General Land Office. As we all know, of course, the reason we're here is because of the publication of your advanced notice for proposed rulemaking under the Energy Policy Act of 1992. That begins a process to determine whether alternative fuel vehicle acquisition requirements for certain private and local government automobile fleets should, in fact, be promulgated.

This advanced notice also requests

comment on progress toward energy security and clean air goals that are set forth in the Act. It also asks for identification of problems with achieving these goals, assessment of whether achieving such goals is practical and consideration of all the actions necessary to meet them. This advanced notice, of course, is primarily intended to stimulate comments that will inform DOE decisions concerning future rulemaking actions and nonregulatory initiatives to promote alternative fuels and alternative fuel vehicles.

The Act requires DOE to determine whether a fleet requirement is, quote, "necessary to meet the 30 percent fuel replacement goal by 2010," and it sets forth a lengthy set of findings necessary to make such a determination.

DOE was, of course, given the opportunity to make findings and promulgate by December 5th, 1996 a final rule to implement an early fleet mandate to begin in model year 1999. Since this process only began in August and since it's now mid September, it's pretty clear that such an early rulemaking is impossible. The Act provides the next opportunity for implementing such a mandate is, for one, beginning in 2002, fully five model

years hence.

It's therefore questionable to me whether this rulemaking will, as a practical matter, have any significant effect on advancing the use of alternative fuel vehicles. A result, I might add, that's not out of line with the intention of certain members of Congress who erected these substantial barriers to creating this mandate in the first place.

Thus the question which must first be addressed in assessing this proposed rulemaking is whether this process is really worth the effort. It is my opinion that if the process is geared to attempting to overcome these extraordinary barriers in order to ultimately create a fleet mandate, the result will be doomed to failure and will not be worth the effort required. If, however, the process is geared to determining other avenues for promoting alternative fuel vehicle use and looking for other opportunities to move that agenda forward, then I believe it can prove quite useful.

With that goal in mind, I would suggest that the rulemaking efforts focus on how to strengthen the voluntary Clean Cities program to encourage local communities to include AFV fleet

programs as part of their efforts to meet the national ambient air quality standards; that they explore ways to direct federal funding to purchases or conversions of additional alternative fuel vehicles, particularly by the private sector. If they look at tax issues like the illogical treatment of liquefied natural gas by the IRS and the existing unequal fuel excise tax burdens, these items deserve and merit attention.

The process should look for ways to encourage the auto and the engine manufacturers to produce a wide array of AFVs and to look at regulatory barriers to AFV commercialization, such as the current costly and cumbersome emission certification process required by the EPA and restrictions on how congestion mitigation and air quality funds provided for under the Intermodal Surface Transportation Efficiency Act can be used.

The process could also look for ways to encourage states to assist, such as providing bond funds for below-market rate loans for financing AFV purchases and conversions and direct financial incentives or tax deductions probably favored over credits for targeted high-milage fleets.

A process geared specifically to

attacking problems is a process which can promote concrete progress toward increasing AFV use. It is my fear, however, that a process geared primarily to overcoming the legislative hurdles created primarily to preoccupy and divert would be a huge waste of energy and will ultimately lead simply to greater frustration and a preservation of the auto fuel status quo.

MR. RODGERS: Thank you, Tom. Coming from someone who's faced legislative hurdles of your own, I appreciate your comments very much.

One question I had was, as you know, the Clean Air Act pioneered -- used a regulatory negotiated process. I think they called it REG/NEG or NEG/REG. I can never remember.

MR. HENDERSON: It depends on the day, I think.

MR. RODGERS: Yeah. And a lot of people here in this room participated in that. And I think some folks have proposed that a similar process, when applied to the fleet rulemaking, might be a healthy process, and I take from your comments, get us to focus on some of the other alternatives. Do you think that that kind of a process would work for this program to do some of

the things that you're suggesting?

MR. HENDERSON: I think it's always difficult to predict the outcome of a process, but I think that that's the kind of process that has a chance to move the agenda forward.

I think what we've heard most of this morning have been the traditional positions that the traditional industries have traditionally advocated, and I don't think that moves the debate one iota. I think if we all continue to engage each other in our prepared remarks that we've all read and heard a hundred times in a hundred different forums, that we will continue to be at exactly where we are now. And I think that there is some intention on the part of certain members of Congress and others that that's exactly what the outcome of this process ought to be.

I think if we're truly interested in advancing the cause of alternative fuels, if we're truly interested in moving forward and looking at alternatives and promoting the technology, then I think we have to be creative. And I think that the kind of process you suggest certainly offers more opportunities for that kind of creativity and that kind of fresh look at what we might do in the near

term rather than spending an inordinate amount of time trying to figure out whether we can promulgate a mandate that might take effect in 2002. Candidly, if we haven't done something by 2002, I don't think we're going to be worried about this problem at that point anyway.

So my gut sense is that we need to focus much more on what can be done incrementally in the near term, how we can focus the best efforts of both the public and private sectors to achieving that end. And I think that process might very well be a good way to do so.

MR. RODGERS: And although I don't see it directly in your testimony here, I'm getting the inference that you think it is important to keep moving towards the Energy Policy Act goals.

MR. HENDERSON: David, if I didn't think it was important, I sure wouldn't have spent the time I've spent in the last eight years of my life doing this. I think it's important for a number of reasons. I think it's important -- when you look at the future of transportation, I personally think that we're going to end up in the not too distant future moving away from the internal combustion engine and probably towards

something like fuel cells. When you look at that, then the development of the componentry, for instance, for electric vehicles becomes critical. The development of the infrastructure for fueling those fuel cells, whether that be natural gas or directly the hydrogen infrastructure or using the natural gas infrastructure, which I think is more likely to produce hydrogen, you know -- and I don't think that that's nearly as far down the road as a lot of people think. As we all know, in Germany just this last year, Daimler-Benz already has an operating fuel cell vehicle on the road and are really moving ahead very rapidly in that regard; so I think that's what we ought to be focusing on.

I don't think we ought to be talking about whether, you know, we're going to continue to have gasoline or we're not going to continue to have gasoline. We're going to continue to have gasoline for a long time into the foreseeable future.

But I think your question of Mr. Looney was a very good one, and that is: Can we do better, and, if so, how? And I think that we can do better. For instance, even with the technology we have today, natural gas vehicles are about 30

percent cleaner than the best vehicles operating on federal reformulated gasoline. That's not a huge difference, but it's certainly a significant difference. And when you start talking about, then, being able to have that as a bridge technology to a much cleaner technology in the not too distant future, then a lot of that begins to make sense.

MR. RODGERS: Thank you. Vivian, did you have a question?

MS. LEWIS: Yes. I wanted to ask you about a statement you made in regards to encouraging the states to assist in the process of moving forward. I don't want to put you on the spot, but I will ask the question.

What would your state be interested in doing? Do you think you could get your state officials to participate in the process?

MR. HENDERSON: Yes, very much so. As a matter of fact, our legislature during the last session in 1995 passed a piece of legislation that directed the use of $50 million in bonds specifically for alternative fuel purposes. Unfortunately, that legislation was not written very well, and we've run into some serious problems

with how to implement it. But I think that with a look at how we might rewrite that, having states provide low-interest loans to those firms wishing to convert, makes a lot of sense.

One of the things we tried to do in order to move the agenda forward, and we started that process here in Texas in 1989, was to focus on government fleets. I think what we've found is that in many instances government fleets don't go anywhere. Government fleets don't travel the kind of miles necessary to justify the costs of transferring to another fuel. As a number of people, including some of the folks from the petroleum industry have indicated, there are certain high-milage niche markets, such as taxi cabs, which is a program we've been working on in New York City for time now, that make a lot of sense for alternative fuels. Having the ability to have the state help finance those kinds of conversions with low-interest loans would make a lot of difference in moving that agenda forward. I think that's one area.

I think the State of New York, for instance, has just recently passed some legislation that would encourage the use of such funds, state

funds, for alternative fuel purposes as well. I think those kinds of actions make a lot of sense.

I think there are other kinds of incentives that can be provided. A state like Connecticut, for instance, has done an awful lot in putting in tax incentives for private fleets that have clearly made it very worthwhile for major fleets, like UPS, Federal Express, et cetera, to convert in those states.

So I think there's a lot of creativity that can be invoked there, and I think you will see a willingness on the part of the states to do this, primarily because those states and those state officials also are the ones who have the burdens associated with meeting the mandates of the Clean Air Act, and they're looking for ways to try to do that.

MS. LEWIS: Thank you.

MR. RODGERS: Thank you very much, Tom. Thank you for your patience.

MR. RODGERS: I have three more speakers. The next one is Mr. Michael Kaplan.

MR. KAPLAN: Ms. Lewis, Mr. Rodgers, my name is Michael Kaplan. I hope I'm representing more than just industry. I hope I'm representing

the citizens of the United States, of which I am one. I am a consultant in the alternative fuels industry. I'm a petroleum engineer by degree, and I've worked in the oil and alternative fuels industry for 15 years.

The comments that I wanted to make today: I'm for this rulemaking for several reasons. Number one, I've been involved in many paradigm shifts, and this is a big one. It's a tough one, but I'm afraid that the status quo is going to fall on its face eventually if we don't do something, and I think it's -- well, the government is in a position to help move that along.

I've heard a lot of argument against this today. One of the biggest ones I've heard is the problem with infrastructure. I've lived in the Metroplex for a good portion of my life, and I've seen fueling stations remodel and remodel and remodel. Obviously, this legislation is for the larger cities. It's not for the small ones that have low volume. It's for the larger ones.

If a company like Exxon or Chevron or any of the other oil companies, instead of replacing their $10,000 dispenser with another $10,000 gasoline dispenser, they chose to put in a $10,000

propane dispenser, tank and pump, which is very similar to what they're using currently, I think the infrastructure change can come as a natural course, if there are people to fill up their vehicles. So I find that is almost a moot point.

Because this has been on the books and it is ongoing, obviously, it's been taken notice by many municipalities, by the government already; and the ball's rolling. If this is put on hold to take a natural course, it could take another 20 years. If this is implemented -- and I'm not saying that the schedule that's currently on the books is necessarily one that can be met. I do think it's lofty goals. And because of that, I would not be against, as Ms. Lewis mentioned, that the committee can change the goals; but I still feel it needs to be implemented.

I've also heard today the cost, and refueling stations has been a big cost, the cost of conversion or the cost of purchasing OEM upfitted vehicles. If this is implemented, once again, Ford currently has a program for propane and natural gas. GM has a program for natural gas and electric. And if this becomes a viable product line, the costs will come in line once again.

Technology change. There is -- as a matter of fact, Thursday and Friday of this week, there's a program called the Propane Vehicle Challenge that challenges universities to create technology to implement and convert vehicles to run on alternative fuels. Last year's program, there was actually one school, I don't recall which one, which has a fuel-injected propane vehicle. That's current technology in gasoline. I mean, it's here. The problem is everybody that I've heard today wants to say, well, we'll get there on our time.

You can use the numbers however you want. Some of the speakers have mixed all the alternative fuels together, taken the worst of all of them and said we won't do it. Well, you can't do that. You've got to specify what you're talking about, and that is why I believe if everything is sorted through and all of the issues are looked at for what they are, that there are reasonable cost-effective answers in this industry.

The industry has grown in the last five years. If you've ever attended the Austin Alternative Fuels Conference, you'll see the first year, I think there were about 15 companies there.

Now there's over a hundred that show up in five years. It's growing, and it's growing fast.

One of the other problems as far as incentives, the natural gas industry has had the benefit of being pushed through by very large corporations, the gas companies; and in their investment, they've seen to it that they are exempt from federal taxation for compressed natural gas and liquefied natural gas as motor fuels. The propane industry has not had that, and yet they're one of the strongest alternative fuels out there because it's a practical fuel.

The neat thing about alternative fuels is they're also regional fuels with your ethanols and methanols and compressed natural gas and propane and even electric. I know electric's growing out in California, and hydrogen is going to be a fuel.

So in closing I think these rulemakings are necessary to help us so I can drive behind a truck on Central Expressway and breathe and also for the security of the country. I think this will solve both of the problems. It may not be as quick as we would like, but hopefully by 2010, 2020 we all can say that this was necessary and now we've gotten somewhere. Thank you.

MR. RODGERS: Thank you. A couple of the speakers earlier said that if we -- I'll paraphrase, but if we go out too early into this market, that a negative impression could actually hurt the long-term growth potential. Is it your impression that we're too early? Ready? Are the consumers going to be happy with the vehicles that are available out there today and the fuels?

MR. KAPLAN: I believe that -- I receive phone calls on a weekly basis from not only cities but from individuals saying, you know, should I do this? I would say as long as we don't push it to the individual. The private sector, I don't have a problem with. I think they can go out there and get a quality vehicle that will save them money on a weekly basis on their fuel bill.

The infrastructure, I've had three companies just in the state of Texas that said if they have a market -- potential market, legislative market, if you will, that they'll put in fueling stations up and down I-35, I-45, I-10. The companies are there to make the investments.

Where it gets garbled -- and it can be accepted. The infrastructure will be there, which I think is the biggest nut to swallow. But as far

as technology and getting your car serviced, what the current technology is doing to the vehicle is very little. They're still using an internal combustion engine that runs basically the same. It can be accepted.

Mechanically, every year problems creep up because every year the auto manufacturers change their engines a little bit, but we can work through those problems. In a week we can take a brand-new vehicle that's never been converted and make it work with the technology just like, if not better than, it was running on gasoline.

MR. RODGERS: Okay. Vivian?

MS. LEWIS: No.

MR. RODGERS: Thanks very much.

MR. KAPLAN: Thank you.

MR. RODGERS: Our next speaker is Mr. Clark Cooper.

MR. COOPER: Good afternoon. My name is Clark Cooper. I'm with the Wonders Automotive Group of Los Angeles, California. We have 18 automobile dealerships located within the state of California, Nevada and Oregon. We sell approximately 4,000 vehicles a year into the fleet segment of the market, and we're a hundred percent

behind this mandate for both public and private use. It's a long time overdue. We wish we had it a few years ago. We deal every day with these customers, and we know what their needs, their wants and their desires are.

I'm fortunate enough to be old enough able to remember our first oil embargo in 1972. I can remember standing on a showroom floor selling a 454 V-8 large, gasoline -- five-mile-per-gallon gasoline car with a line that went around the city block twice to get to the gas station on the corner and watching the fights break out.

Our dependence on foreign oil is not good for this country. It's not good economically. It's not good for our environment. We think that we need the mandates to push industries and captains of industries here in the United States to accept these alternative fuel vehicles.

We are franchised with Ford, General Motors, Toyota, Nissan, Saturn, so we provide a full range of automobiles, the electric, the methanol, the compressed natural gas, liquefied natural gas.

We think in order to look at the future, you've got to look at the past. If you look at the

way the automobile industry for the last 75 years has developed, back in, you know, 1908, 1909, 1910, you had basically five types of fuel vying for the customer. You had a diesel car, you had a compressed natural gas car, you had a steam car, you had an electric car and you had a four-cycle internal combustion gasoline engine. They were all vying, struggling, kind of like what you see out here in this alternative fuel industry currently today. And it wasn't until technology -- a guy by the name of Charles Kettering came along with the first electric self starter, and everybody liked it, and all of a sudden everybody went to the gasoline engine.

We predict that you're going to see that in the alternative fuel arena. Primed by the federal government through these mandates, there's going to come to pass a technology that's going to leap us into the future, probably one of these types of fuel. We respect your wishes to be fuel-neutral, as you have. We think that that should continue.

As far as listening to some of these speakers today saying that we can't do this, you know, we don't believe that there's anything that

the industrial might of the United States cannot do. If you look at our technology and our capability, at the outbreak of World War II, Douglas Aircraft of Long Beach, California was building one DC-3 every nine months. Within six months of the outbreak by a hostile nation offshore, we were building one DC-3 every 72 hours. We don't believe that things like that cannot be accomplished providing we have the proper incentive, and we look to you, the federal government, as the parents, if you will, to give us that proper incentive.

I think there's another reason why we need to do this, and this is for our own national security. You know, we don't globally source the production of our cruise air missile, and there's a reason why we don't do that. Why do we globally source our fuel? It's so important to the United States and specifically to the automobile industry.

One out of every six people in the continental the United States either directly or indirectly derives their income from the automobile industry. I don't know if you remember what the last two oil embargoes did to us, but it was

devastating.

And last but not least, if you look at our Pledge of Allegiance, what does it say? It says, "One nation under God, divisible by all." We think "divisible by all" means everybody, not just the federal fleet or the state fleet.

That's all I have to say.

MR. RODGERS: Thank you very much. Vivian, did you have anything?

MS. LEWIS: No, I don't have anything.

MR. RODGERS: Thank you very much, Mr. Cooper.

MR. COOPER: You're welcome.

MR. RODGERS: You get the award for most inspiring presentation. I do have one more speaker, at least, and that's Mr. Robert Lynch.

If you want to make a clarifying statement or a rebuttal, please, now's a good time to give your name and number to Andi back at the back, and we'll work you in the schedule. Go ahead.

MR. LYNCH: Good afternoon. Thank you, Mr. Rodgers and Ms. Lewis. My name is Robert Lynch, and I'm probably the oldest person here, so

I'll speak from age as well as experience.

I'm an energy engineer, and that's by training and by purpose. And I feel like that we need to address this from a total concept, and I see the oil industry -- and my dad was with Shell Oil Company for 37 years, and I grew up in the oil patch all over Texas, so I know this industry pretty well -- that we need to approach it as a cooperative effort and not as an us-against-them effort. And I see the oil industry, and I see some exceptions, but I've called on all of them, and they are determined they're not going to do this. And I don't think that's to the benefit of the American public, their customer, or the benefit of us that are involved.

This is supposed to be a public meeting, and I don't see very many of the public here, so I want to speak a little bit for the public sector. It depends on whose dog you're kicking as to how your reaction is, and I don't think I have a real strong dog to kick in this, so I'll try to be as neutral as I can with my comments; but I think the statistics have to be brought out.

There is a finite amount of fossil fuel. We're still finding new fields, but even as we

bring those fields on, we're depleting fields, and there's a measurable amount. I can remember when the oil industry told us that we were going to run out of natural gas, we would be out in 50 years; and so natural gas went up to $6.05 CFM. Wasn't true, but they proved to the government and to the public with their statistics that we were going to run out of natural gas. Now we're to the point we're saying we've got almost a hundred years of natural gas.

It may be that we have a hundred years of oil, but I don't think so, not from my measurements and from what I understand. My charts, my diagrams, my bulletins that I read say that we're going to start to have a real strong decline of new oil sources in about 2010, and we're going to see a strong decline.

One of the statistics brought up today was that if we had as many people driving cars in China as we have in the rest of the world that they would use all of the oil produced daily. China as a nation would use all the oil. We wouldn't have any over here in America. That's not going to happen either, but it's a frightening statement.

I want to talk about types of fuel. If

the oil industry cannot make a profit, then they are going to be a very aggressive enemy, so we must -- whatever plan we come up with must protect those vested interests so they make a profit. They have enormous investments in oil, enormous investments in drilling rigs, enormous investments in infrastructure and filling stations. And had the oil industry not made a profit and not done that, we wouldn't have an infrastructure for gasoline and diesel fuel.

I want to speak about diesel fuel as a fuel, and I hope I can find a commonality with Exxon and Mobil and Chevron and the other major oil companies, including Shell Oil Company. And Shell Oil Company has a representative for alternative fuel at this meeting, and I don't see one from Mobil. I don't see one from Exxon. So, gentlemen, I'd like for you -- no, sir. Did you attend the meeting -- all these meetings for the alternative fuels?

MR. McDONALD: Which ones? There were thousands.

MR. LYNCH: Well, it started on Sunday.

MR. McDONALD: We didn't go to this

one.

MR. LYNCH: I see. We would invite you to join us and come, because I don't think we're an enemy, but we're striving to achieve something that says there's going to be a time we're going to run out of our fossil fuel, and what is the alternative.

The National Energy Policy Act is the first thing I've seen that's thrilled my heart a little bit -- is that we think we might have a National Energy Policy Act. We haven't had one up until now. Our policy act is if Saudi Arabia gets attacked, we go protect them. If Iraq gets out of line, we go protect them. We send our American boys over there and we trade their lives for oil. And what is that oil? That's dollars, profits to our stockholders and to the people that work in that industry.

I want to speak about diesel fuel. Diesel fuel is not an old fuel in the world, as far as America is concerned in diesel. It was used as a transportation fuel for trucks, and Mercedes Benz changed that; and, I guess, single-handedly they changed that. But they worked with the oil industry and didn't try to change the oil

industry. Because in Dallas, Texas when Mercedes Benz came into town, there was not a single place that you could fill up a Mercedes Benz vehicle. You could fill up a truck at the depot, but you couldn't fill up a car. So Mercedes Benz opened a filling station, one filling station in north Dallas, and finally got to where they had enough filling stations where the cars were being filled up, so you were comfortable. Otherwise, if you ran out of diesel fuel, you had to have a wrecker come get you and haul you in.

Diesel fuel represents 50 percent of all the oil that we use for transportation fuels. 50 percent of all the oil that we process for transportation is devoted to make 50 percent of the diesel fuel. I hope I'm making that statistic clear.

We have around 240 to 250 million automobiles in America. We have 16 million, approximately, diesel trucks and stationary engines running on diesel fuel, and the 16 million diesel trucks drive more fuel than all the gasoline cars in America. That's something else. So if we can move a structure away from diesel fuel, I don't think we've hurt the oil companies. And they

control natural gas either through financial investments or through the utility companies. I know the railroad company owns some natural gas. But if we could ask them to look at diesel fuel -- not gasoline, leave gasoline alone. Let's talk about 50 percent of the problem -- we would eliminate 50 percent of our imported oil. Now, that's a sizable amount of savings, and still let the oil companies make the profit on the natural gas.

The projections are that we'll import 73 percent of all oil by 2010, and I guess in 2020 we're importing a hundred percent, but of what? If we've used it up, we're not importing it.

If we could address, get the industry -- I'm talking about cooperative effort. And let us look at the diesel transportation system. That's what all of us fuss about when we're on the road is the diesel trucks with the pollutants, the public transportation with the pollutants. And we have an accurate statement that says that 50 percent of all pollution, 50 percent of all pollution is caused by diesel fuel, not gasoline. 50 percent of all pollution is caused by diesel fuel. So if we could have a meeting where we could get together and say

let us work on a problem, we could approach that.

We have diesel engines being developed by Cummings, Detroit Diesel, Navastar International, Caterpillar to run on natural gas, and they actually improve the performance of those engines. I have a vested interest in that I have a patent for a device that would convert diesels to run on natural gas or propane or hydrogen, so I do have a dog in the fight somewhere.

I'd like to get an attitude here that we do this. I called on utility companies, and they're under Title Five. The oil companies are under Title Five. I don't see any cooperation at all from them the major utility companies -- there are exceptions -- nor from the major oil companies, and there may be exceptions. I don't know that. But that mandate's got some numbers in it that start in 1998 and the year 2000, and I think it's to the benefit of the American public that we try to address pollution.

I'm not against profits. I want profits because I want to be able to get my children to work for natural gas companies and the oil companies. I have eight children, and five of them are involved in some form of the oil industry, so

I'm dependent upon them to be supported; so we want to keep this infrastructure.

I've turned this into a ramble, and I didn't intend to do that, but I'd like to see if we couldn't find some people to set the example. The utility companies are supposed to set the example for us. That's what the law, Title Five says. And it says the fuel providers will set the example, and I think we need an example set.

I'm working on two private fleets that are committed to alternative fuel because they want to be the first companies to be nonpollutant. Coca-Cola is one of them. They plan to have the first bottling fleet that is clean air. And the other, strange as it may seem, is American Airlines, and they're doing it voluntarily. So I think that if we could work towards that.

If we don't have somebody pushing us -- if I didn't have a first grade teacher demanding that I learn, I wouldn't have learned anything. And I think we need the DOE to have some guidelines for us, and the industry needs to work with them a little bit and try to get this thing moving.

If it's by 2004, I may not be around, but it's going to be important for our children. Thank

you.

MR. RODGERS: Thank you. I want to thank all of our scheduled speakers. We now have the opportunity, as we're coming to a close, for anyone else who was not scheduled that would like to come forward and make a comment. Now is your last chance to do so today, although you're certainly welcome to provide written comments.

Seeing no one, I'd like to move to the next step, which is if anyone would like to make some clarifying comments. I have one person that signed up now, Tom McDonald. If anyone else wants to make a clarifying comment, put yourself on the list and you'll come next. Thanks, Tom, for sticking around so long and staying with us.

MR. McDONALD: Again, I'm Tom McDonald from Mobil, and I'm simply coming up -- I lost my train of thought during a question, and that's what I'd like to cover.

We talked about what it is that would make the fuels economical or the vehicles economical and get industries like Mobil Oil, Exxon, Texaco, Chevron, the other majors, involved in this. And I think the answers lie in two places, and they were from two previous speakers.

I originally started to say it was Lone Star, and I have to back up; that's not correct. If my recollection is correct, it was Mr. Amos from the city of St. Louis who indicated that in general, as petroleum naturally becomes less economic -- and whether that's through abundance or domestic abundance or however you want to read that, but less economically abundant -- private businesses and entrepreneurs will rush to fill the void. And that was borne out by the gentleman from Lone Star who indicated that currently they are not receiving a return on their capital investment in alternative fuel infrastructure.

And therein lies the key, that many people testified today that the technology is there. I've driven a CNG vehicle. I've not driven a propane vehicle, but I have driven a CNG vehicle. The technology is there. The technology for the infrastructure is there. My prior life before being involved in government regulations was in engineering, and I was in charge of service station construction. We've done natural gas facilities. It's technically feasible. The problem is the cost and the return on capital investment. As it becomes more economical,

companies will rush to fill the void.

That, basically, is our position on this matter.

MR. RODGERS: Thank you very much for sticking around. I have one other person who wanted to make a clarifying comment, Kim McKenzie. You get the award for staying power, since you were the first speaker.

MS. McKENZIE: Thank you. I'm Kim McKenzie with Natural Fuels out of Denver. Coincidentally enough, my comment also deals with fueling stations.

Merely to say that -- again, today we've heard several times that everyone knows a CNG fueling station costs 250 to $500,000. I don't know how that's out there. It doesn't.

I could insist on a minivan to get my kids to school be a Silver Shadow, but there are other alternatives that could meet that need for me; and I think that's true in CNG fueling stations as well. Before those kinds of numbers factor into anyone's evaluation of the economics and the feasibility of alternative fuels, I sure wish we could pursue that a little bit further.

That's all I have. Thank you.

MR. RODGERS: Actually, thank you for that, Kim, and if you have an opportunity, before the close of the comment period, to submit a brief assessment of infrastructure costs and the variety of different infrastructures and refueling options that are available, we'd be happy to have that in the record.

MS. McKENZIE: I can. If you're interested, I'll give you just some quick rules of thumb.

MR. RODGERS: Sure.

MS. McKENZIE: We as an industry and we as a company -- and this is not a sales pitch, believe me -- are working and can achieve fueling station costs of $1,000 per CFM, okay? This is considerably less than some of the early stations that went in. If you're looking at a 60 CFM, cubic foot per minute, station, we ought to be able to do something in that regard for about $60,000, okay? This is considerably under the 500,000 number that everybody knows is true.

The other piece I would like to see is we believe that for every dollar we invest that we can make a respectable return on investment if we can sell 1.3 gallons of fuel per year for every dollar

invested. So we're not looking at having to do only transit bus sized facilities. All we're asking for is a sufficient market out there that we can realistically hope can get some sort of fuel use so we can make this economically viable. Does that answer your question?

MR. RODGERS: Yes. Thank you. Vivian, would you like to ask?

MS. LEWIS: No. Thank you.

MS. McKENZIE: Thank you.

MR. RODGERS: I want to express my appreciation for all the folks that came out today and made comments. This is a very important part of the Department of Energy's commitment to fulfilling the requirement of the Energy Policy Act, to receive public comment. And I really want to commend each and every one of you for coming forward today and contributing to that process.

I also want to thank Vivian for sharing her time with us and Andi Kasarsky for organizing and holding this event. And I invite you and your organizations to private additional comments at our subsequent hearings on September 25th in Sacramento and October 9th in Washington, D.C. Thank you very much.

C E R T I F I C A T E

I, Michael E. Miller, Certified Shorthand Reporter in and for the State of Texas, do hereby certify that the above and foregoing pages contain a full, true and correct transcription of my shorthand notes taken upon the occasion set forth in the caption hereof, as reduced to typewriting by me and under my supervision.

I further certify that this transcription of the Court Reporter's notes truly and correctly reflects the exhibits admitted into evidence, if any.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this 19th day of September, A.D., 1996.

Michael E. Miller, CSR
Certified Shorthand Reporter in and for
the State of Texas